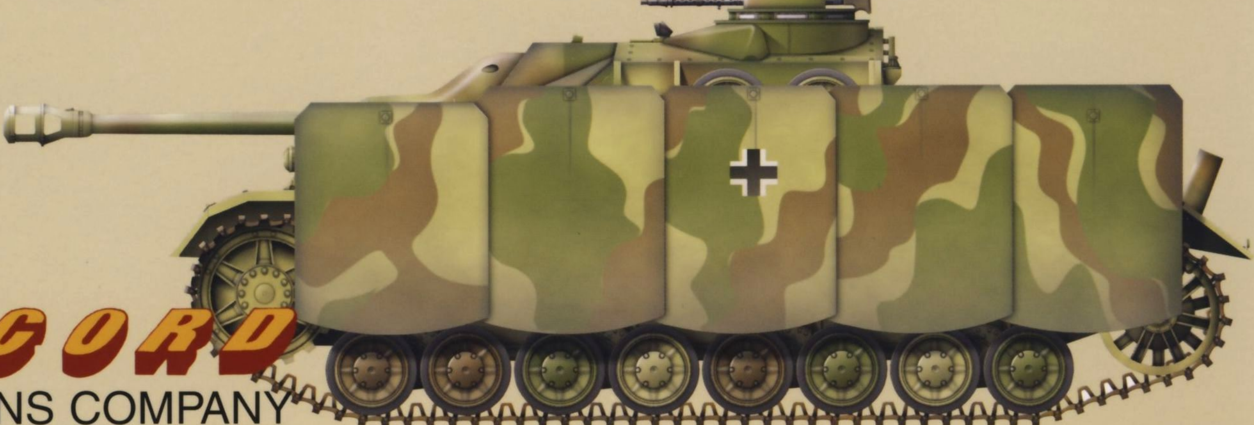
ARMOR AT WAR SERIES

7070

Panzer-Divisions in Battle 1939-45

Tom Cockle



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1939-45

Text by Tom Cockle
Color plates by Laurent Lecocq

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INTRODUCTION

There are already many extensive and authoritative accounts on the major battles that took place during the course of World War II in Europe. It is not our intent here to reiterate those accounts, but to present a brief overview and a photographic supplement to those accounts, directed to those interested in the military history of the German Army in World War II. At the same time, we will present, for the benefit of those who are interested in modeling the military vehicles of the German Army, a series of color renderings of a variety of those vehicles based on our interpretation of the many black and white photographs featured in the book.

Blitzkrieg

In the early morning hours of 1 September 1939, Germany unleashed a new concept of warfare known as Blitzkrieg or 'lightning war' which employed a fast moving combination of motorized infantry, armored and aircraft to overwhelm the opposing forces. In the interest of brevity, this narrative will be restricted to the actions of the various Panzer forces involved.

Geographically, Poland was an ideal proving ground for Blitzkrieg. Its long exposed border with Germany provided broad access and the generally flat countryside offered fairly easy going for German forces.

Code named 'Fall Weiss', seven Panzer-Divisions, four leichte-Divisions and two independent Panzer-Abteilung were employed for the invasion of Poland. Panzer-Division Kempf in I.Armee-Korps and Guderians 2.Panzer-Armee with 3.Panzer-Division and later 10.Panzer-Division thrust across East Prussia and then south, reaching Brest-Litovsk on 15 September. Meanwhile, von Kleist's 1.Panzer-Armee consisting of the 2.Panzer-Division and 4.leichte-Division and attacking from Czechoslovakia, joined up with Guderians forces on 17 September thereby sealing the fate of the Polish Army. In the capital of Warsaw, 4.Panzer-Division continued to fight until the capitulation of the city on 27 September.

The success of the German 'Blitzkrieg' in Poland took the world by surprise and changed the face of war, however, the Allies would be slow in learning the lessons of mobile warfare.

What followed was a period of relative peace during which the German Army continued to build up and reorganize its Panzer-Divisions using the experience gained in Poland.

The Battle for France

On 9 April 1940, the Germans launched Operation 'Weserübung', the invasions of Denmark and Norway in preparation for the planned invasion of France and the Low Countries. Although these nations were neutral, it was necessary for Germany to occupy them to prevent a British incursion. The operation was supported by a small Panzer force Pz.Abt.z.b.V.40 consisting of three companies of Pz.Kpfw.I and II. Two Kompanies were initially sent into Denmark and one shipped to Norway. Additionally, three of the multi-turreted Neubau-Pz.Kpfw.IV arrived in Norway on 19 April followed by the other two Kompanies from Denmark the next day. The rugged terrain restricted German armored activity to the narrow valleys north of Oslo and prevented them from being utilized in any large scale operations. Resistance continued in the north until the Norwegian government capitulated on 10 June 1940.

This operation was quickly followed up by 'Fall Gelb', the invasion of France on 10 May 1940. Seven of the ten Panzer-Divisions taking part in the attack were concentrated in Heersgruppe A. Their objective was to cut off the Allied forces massed in Belgium expectantly waiting for the German main thrust to follow the German plan of 1914 to sweep through Belgium towards Paris. The 3. and 4.Panzer-Divisions attacked into Belgium to protect the German right flank while 9.Panzer-Division suppressed resistance in Holland. Although the Allies had a 3:2 superiority in tanks, this would be offset by superior German leadership and tactics.

After von Kleist's crossing of the Meuse on 13 September the speed of the German advance resulted in the occupation of most of northern France and Belgium within eleven days and by 24 September the bulk of the Allied forces were trapped in a small pocket around Dunkirk. Hesitation in the German high command allowed the bulk of the trapped men to be evacuated to fight another day but the victory was won. On 22 June 1940, an armistice was signed and armed resistance ceased on 25 September.

Intervention in the Balkans

Jealous of his Axis partners successes, Italian dictator Benito Mussolini attacked Albania on 28 October 1940. Met with stiff Greek resistance, the attack soon turned into a disaster for the Italians and in response to a request from the Greek government, a British Expeditionary force landed in Greece in November. Although Hitler would have preferred to avoid a conflict in the Balkans, he had no choice but to bolster his ally. On 6 April 1941, the German 12.Armee launched an offensive into northern Greece from neighboring Bulgaria code named Operation 'Marita' with 2.Panzer-Division while simultaneously sending 5. and 11.Panzer-Division towards Belgrade and 9.Panzer-Division toward Skopje in Yugoslavia. At the same time 2.Armee thrust into Yugoslavia from Hungary code named 'Weisung 25' with 8. and 14.Panzer-Division headed for Belgrade which fell on 12 April. Yugoslavia capitulated on 17 April and Greece on 21 April 1941. The diversion in the Balkans had succeeded in delaying German plans against the Soviet Union by several weeks with disastrous results.

War in the Desert

In early February 1941, the Italian Army was on the brink of defeat in North Africa. In January, Hitler had already begun preparations to send 5.leichte-Division to North Africa but due to the Italian defeat at Beda Fomm, this force was bolstered with the addition of 15.Panzer-Division. Hitler chose Generalleutnant Erwin Rommel to command the newly formed Deutsches Afrikakorps.

The first German units arrived in Tripoli on 14 February where they were immediately sent east towards El Agheila to establish a forward line of defense. On 23 March, 5.leichte-Division captured the town and by 11 April, the British had been thrown out of Cyrenaica except for a small force surrounded in Tobruk that was eventually to hold out for almost a year. Reinforced by the newly arrived 15.Panzer-Division, the DAK defeated a large British force at Halfaya Pass in May.

On 18 November, the British attempted to cut off the German garrison at Halfaya Pass. Rommel directed 21.Panzer-Division, reorganized from 5.leichte-Division, against the British attack and inflicted heavy losses at Gabr Saleh. On 21 November, the DAK engaged the British forces near Sidi Rezegh where both sides suffered heavy losses. By early December, with few tanks in operating condition and supplies running low, Rommel came to the conclusion that he would have to withdraw from Cyrenaica and by 10 January 1942, the Germans had retreated back to El Agheila. The pursuing British, also short of supplies, were forced to halt as well.

Reinforced with new tanks, fuel and ammunition, Rommel again renewed the offensive and by 21 January had retaken Agedabia and Beda Fomm and by the end of the month had pushed the British back to Gazala. After a lull in the fighting, the Axis forces swept around Bir Hacheim at the end of May, threatening the British rear and forcing the British to fall back. By 18 June, Tobruk was once again surrounded. The fortress surrendered on 21 June and the British continued their retreat to El Alamein in Egypt. After a number of futile attempts to crack the British lines, Rommel was forced to halt in early July. Another attempt in late August was also repulsed.

The British continued to build up their strength and on 23 October 1942, opened up on the unsuspecting Axis forces with a terrific artillery barrage. On 9 November, the great retreat west began. Meanwhile, on the other side of the African continent, American troops had landed in French North Africa on 8 November.

In response to the American landings, reinforcements including 10.Panzer-Division and s.Pz.Abt.501 equipped with the new Tiger I were shipped to Tunisia. By 19 January 1943, the Germans had retreated back across the Tripolitanian border to Mareth and on 22 January, Tripoli had been evacuated. On 18 February, Rommel took Kasserine, inflicting heavy casualties on the inexperienced American troops but was prevented from advancing any farther than Thala and Sbiba by stiff Allied resistance. An attack against the Mareth Line by the British on 20 March forced the Germans to pull back and by mid April, all Axis forces had been squeezed into a small area around Bizerte and Tunis. On 12 May 1943, resistance ceased with the surrender of all Axis forces in North Africa.

In the next volume of **Panzer-Divisions in Battle 1939-45**, we will cover the invasion of the Soviet Union which began on 22 June, 1941 including some of the major armored engagements fought during the early, spectacular advances made by the German Army on the road to Moscow.

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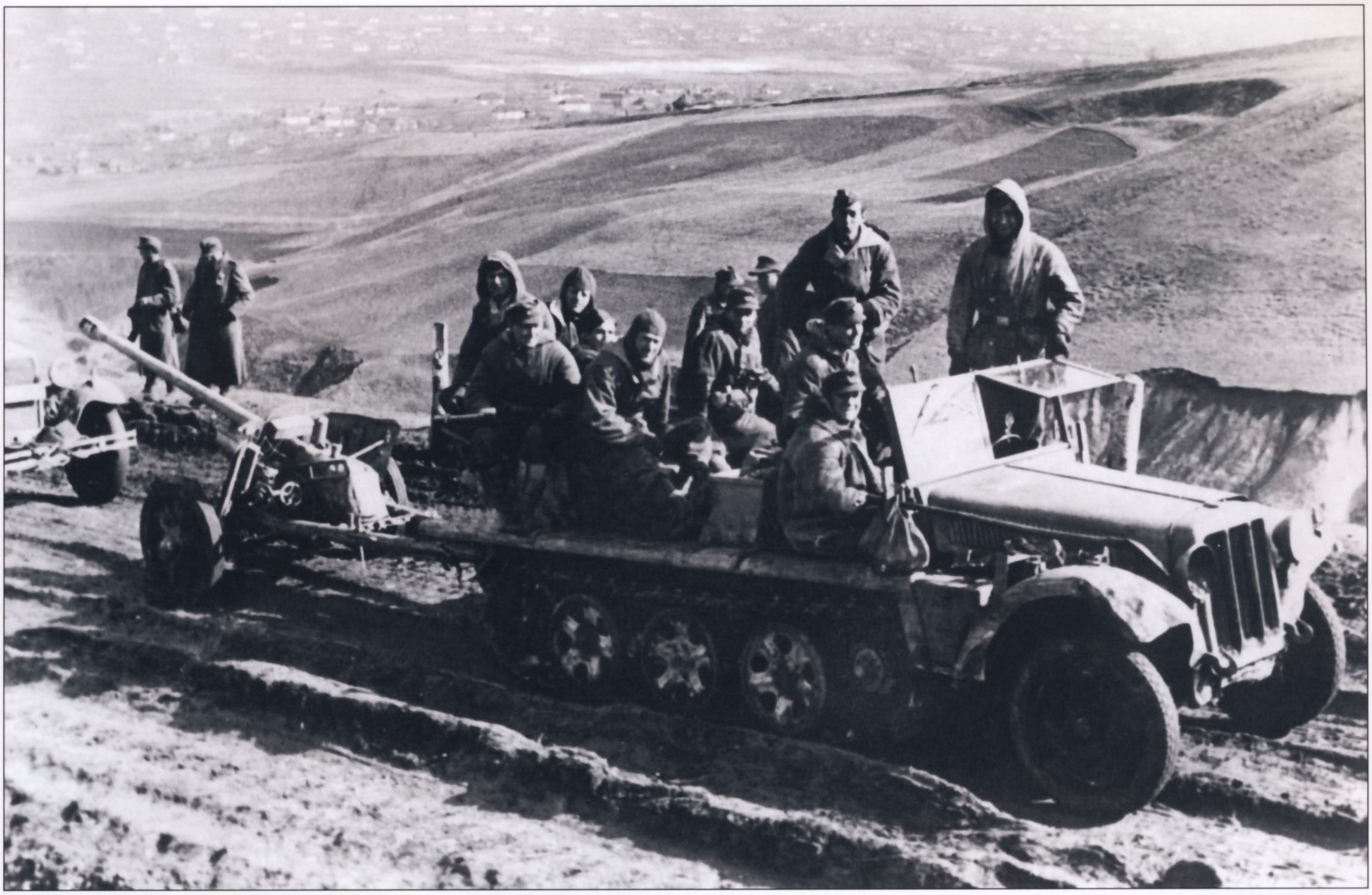
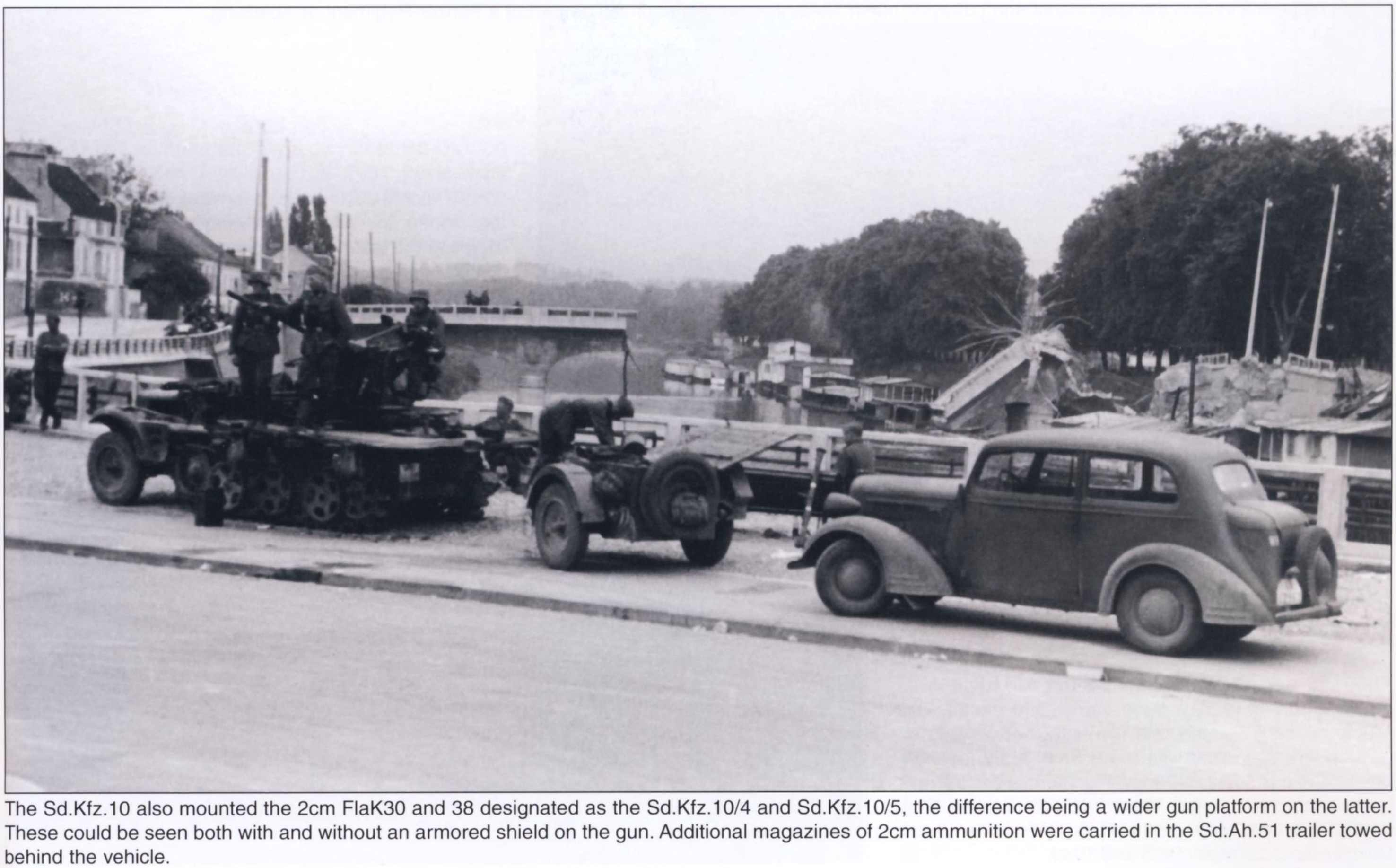
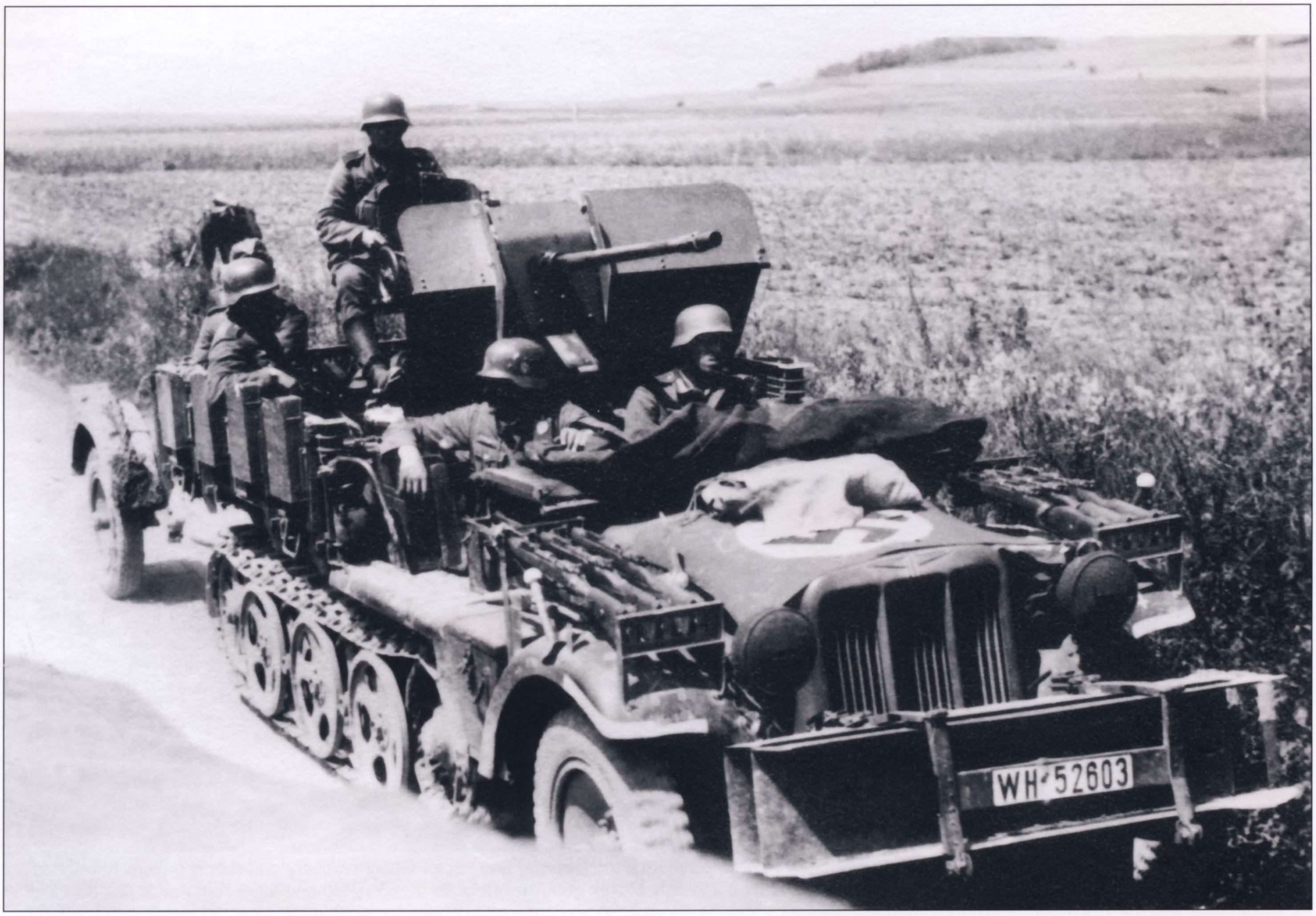


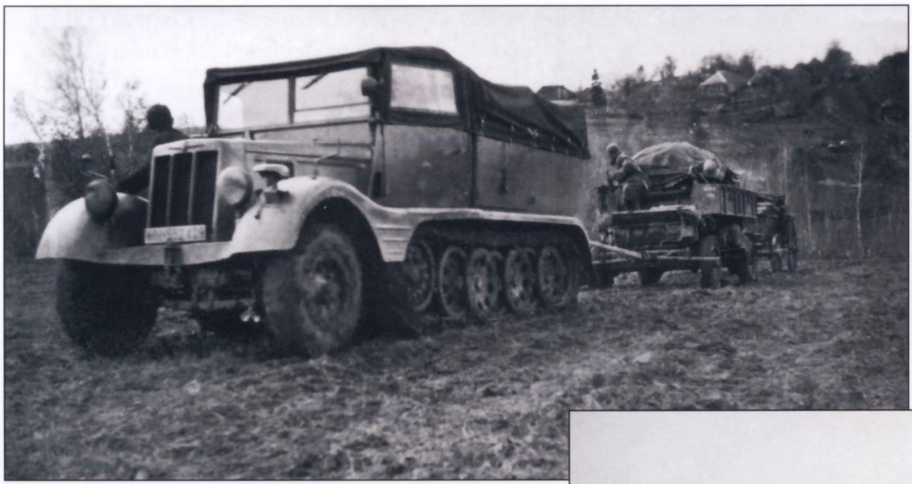
The Leichter Zugkraftwagen 1-ton Sd.Kfz.10 was developed in 1932 to serve as a troop carrier and tractor for light artillery and supply trailers. It weighed 3.4 tons and could carry a load of 1.5 tons or a squad of 8 men. It hauled a variety of light guns including the 2cm FlaK30 and 38, 3.7cm PaK35/36, 5cm PaK38 as shown here and the 7.5cm and 15cm Infanteriegeschütz.



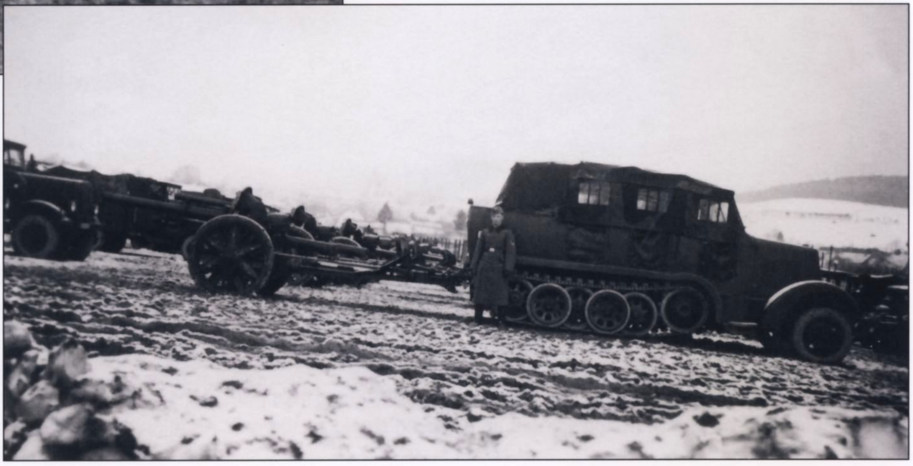
The Sd.Kfz.10 also mounted the 2cm FlaK30 and 38 designated as the Sd.Kfz.10/4 and Sd.Kfz.10/5, the difference being a wider gun platform on the latter. These could be seen both with and without an armored shield on the gun. Additional magazines of 2cm ammunition were carried in the Sd.Ah.51 trailer towed behind the vehicle.



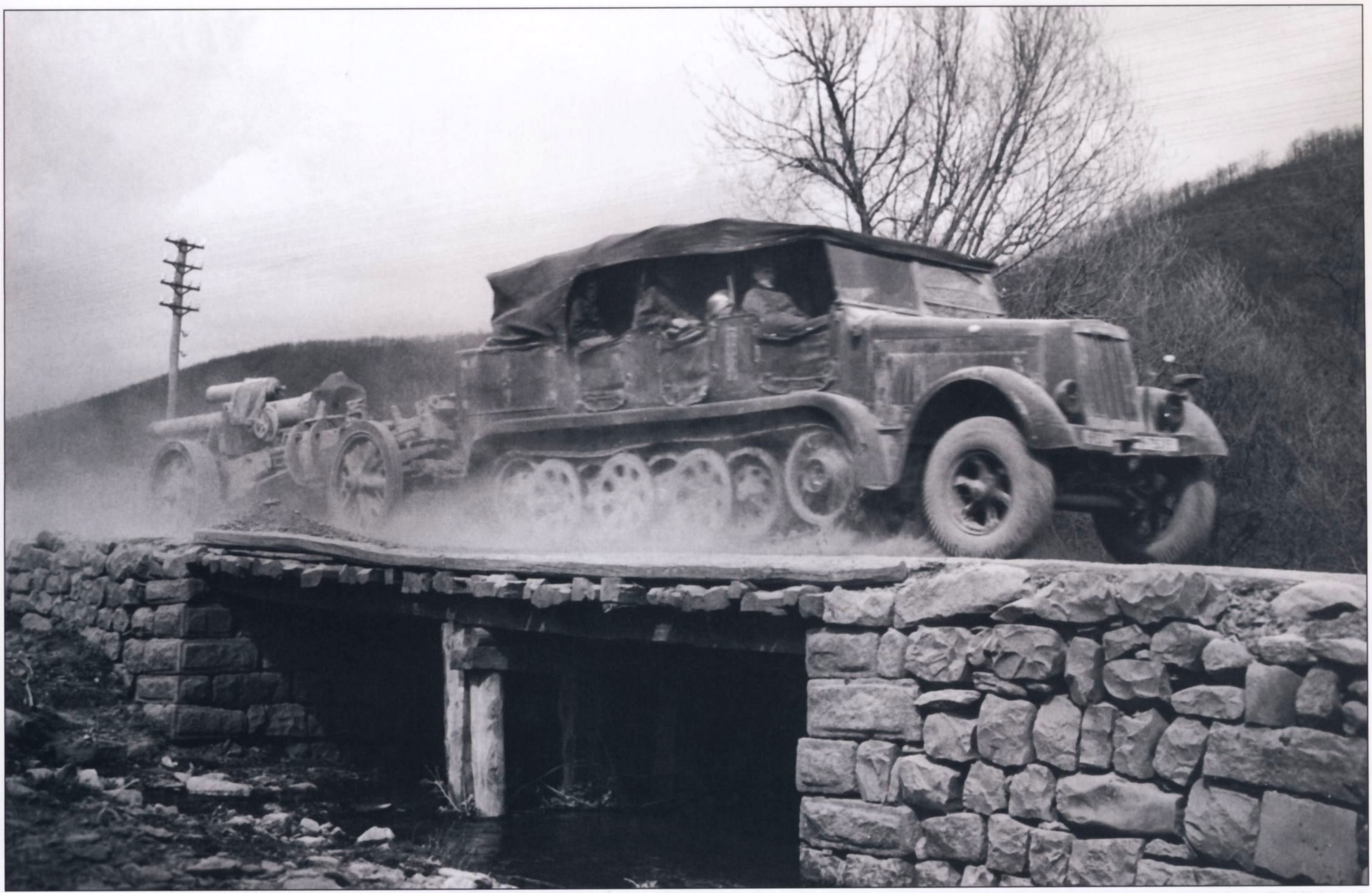
This is an Sd.Kfz.10/4 as can be seen by the straight fender extending back above the drive sprocket. Initially, these vehicles were issued to independent anti-aircraft battalions in both the Wehrmacht and Luftwaffe but in 1942, they were authorized as part of a Panzer-Regiment or Abteilung.



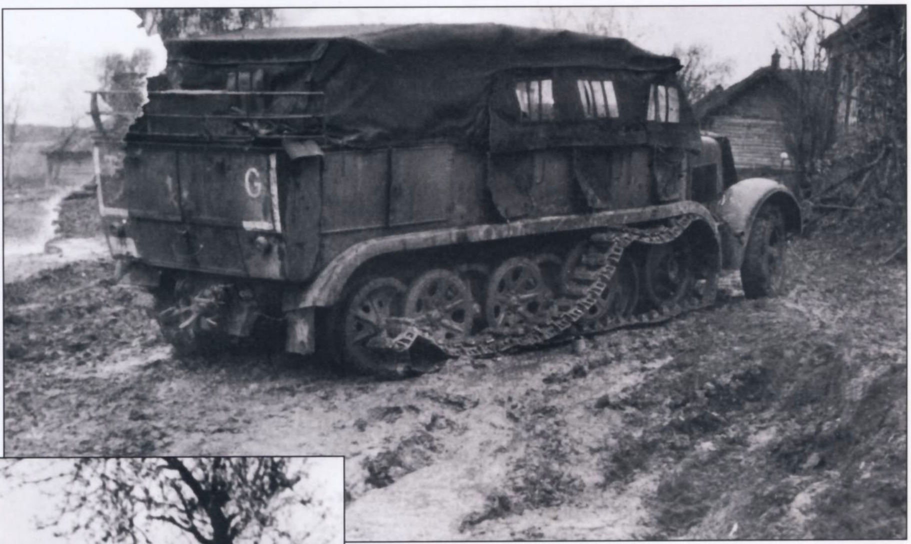
The Leichter Zugkraftwagen 3-ton Sd.Kfz.11 was developed in 1934 for towing the 10.5cm leFH18 howitzer but was also used for towing the 7.5cm PaK40. It was also used by Nebelwerfer units for towing their rocket launchers (Sd.Kfz.11/4) and when used in this role, was modified to carry the rockets in special racks located behind the driver's compartment. Here, a supply trailer and a horse drawn wagon are being helped across a muddy field.



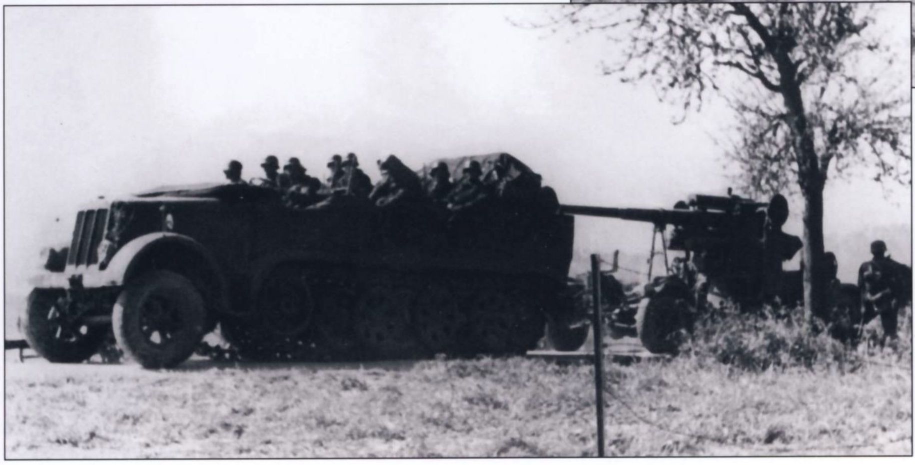
The Mittlerer Zugkraftwagen 5-ton Sd.Kfz.6 was developed in 1934 as a troop carrier and tractor. This one is an early version with two less road wheels on each side and is fitted with the artillery body featuring one less row of seats and an ammunition stowage locker in the back. It is towing a 10.5cm leFH18 howitzer. Only about 3000 units were produced by Büssing NAG and Daimler-Benz between 1935 and 1943.



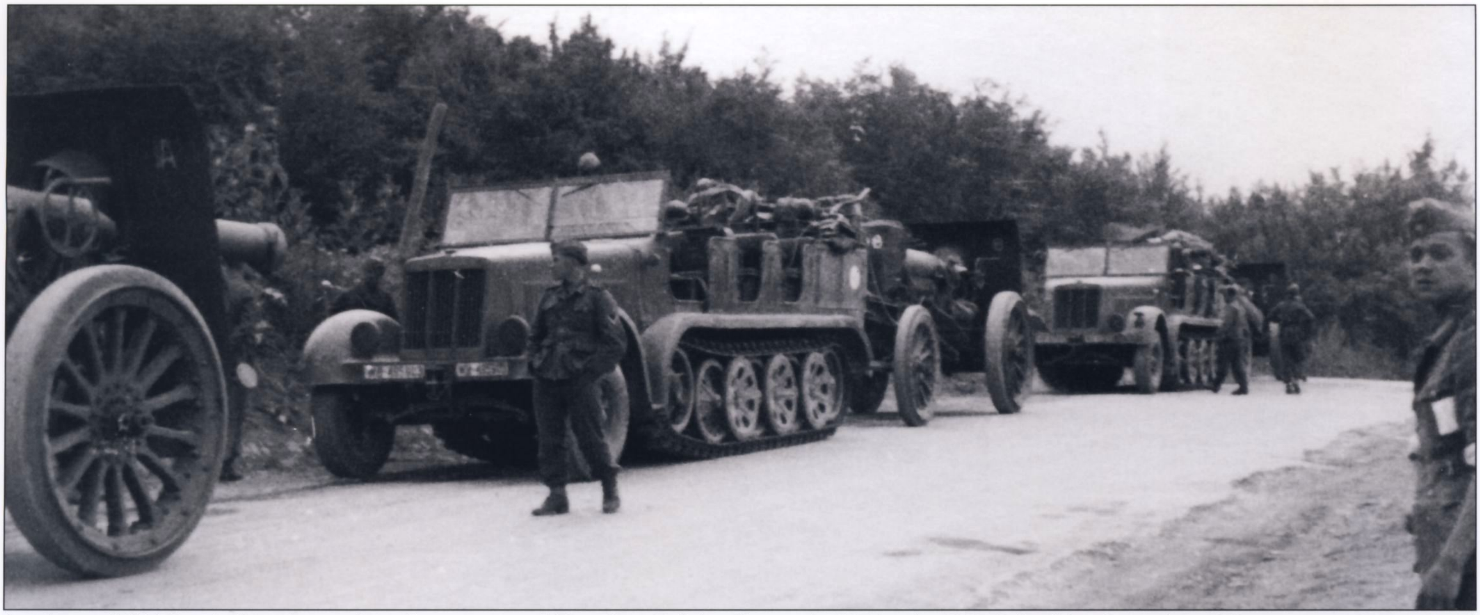
The Mittlerer Zugkraftwagen 8-ton Sd.Kfz.7 was developed in 1932 as an infantry carrier and for towing the 15cm sFH18 howitzer and the 8.8cm FlaK18 anti-aircraft gun. The artillery version, like the one in this photo towing a 15cm sFH18 howitzer, had an ammunition stowage bin in the back and two rows for seats for the crew. The infantry version had one more row of seats and could carry from 15 to 18 men. A heavy coat of dust covers the dark gray paint of the both the half-track and gun.



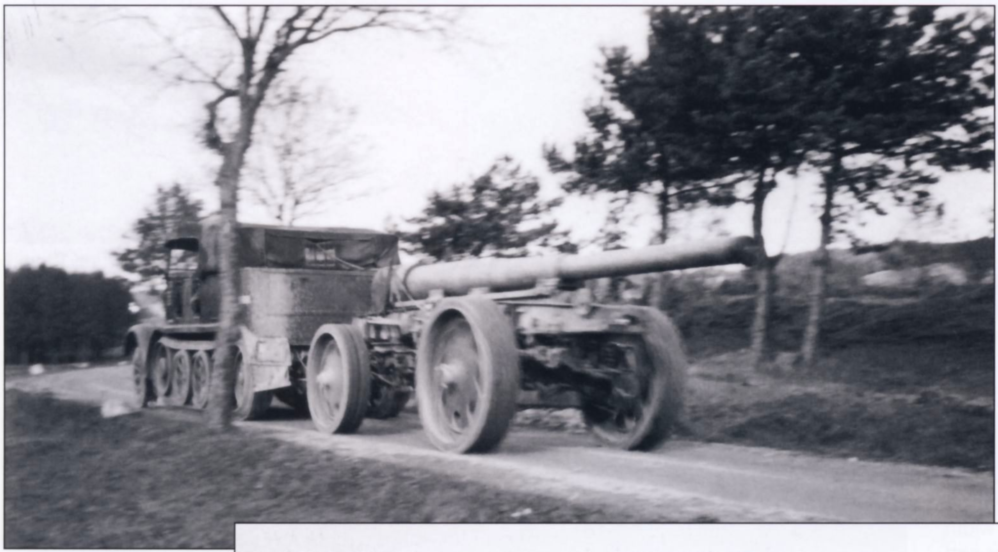
This Sd.Kfz.7 from the artillery regiment of SS-Division 'Reich' is finished in Dunkelgrau RAL 7021. White width indicator stripes have been painted along the outer and part of the lower edges of the double doors on the rear of the body. The tactical sign for a towed artillery unit is painted in white on the upper left door and the letter 'G' signifying Panzergruppe Guderian on the right door. It also appears that the number '1' is painted on the left door near the center of the vehicle. On the lower left side, an 'SS' license plate can be seen, the numbers for which are illegible on the original photo.



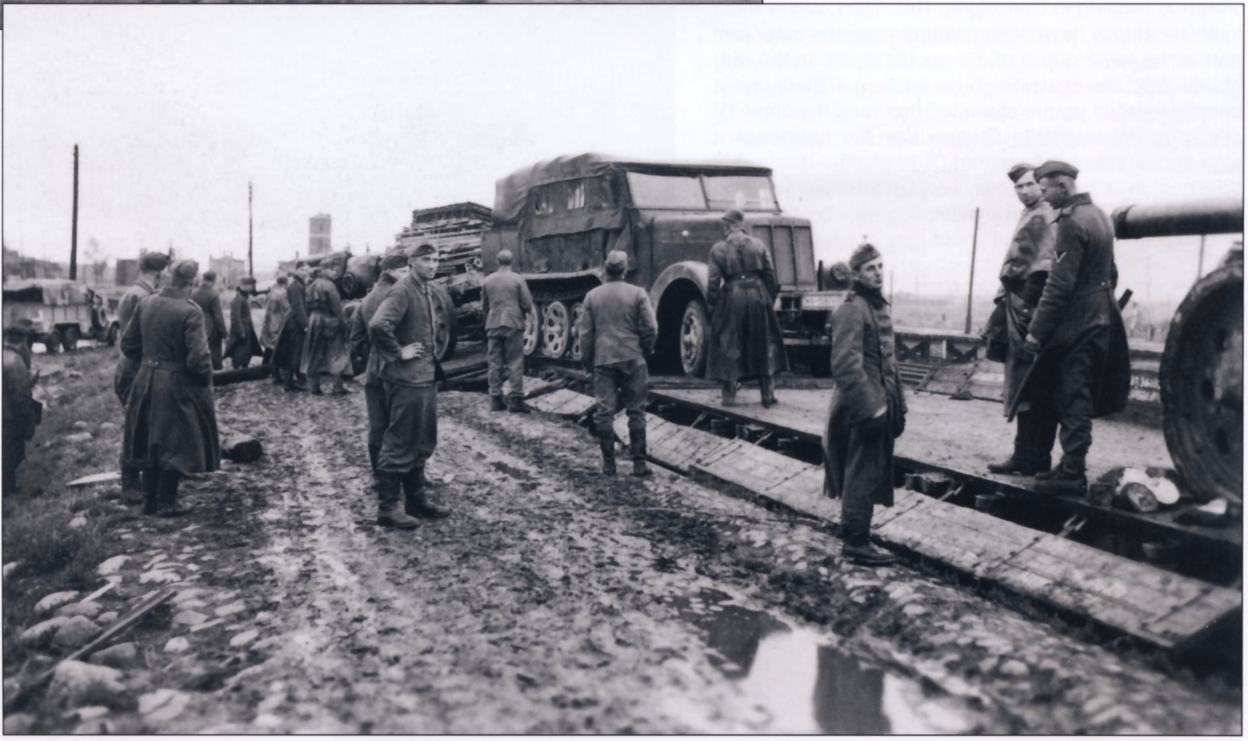
This Sd.Kfz.7 is being utilized in one of its intended roles, towing the 8.8cm Flak18 anti-aircraft gun from a Luftwaffe anti-aircraft unit. One way of distinguishing the Sd.Kfz.7 from the other German half-tracks is by the number and shape of the holes in the road wheels. The Sd.Kfz.7 is the only one with seven holes.



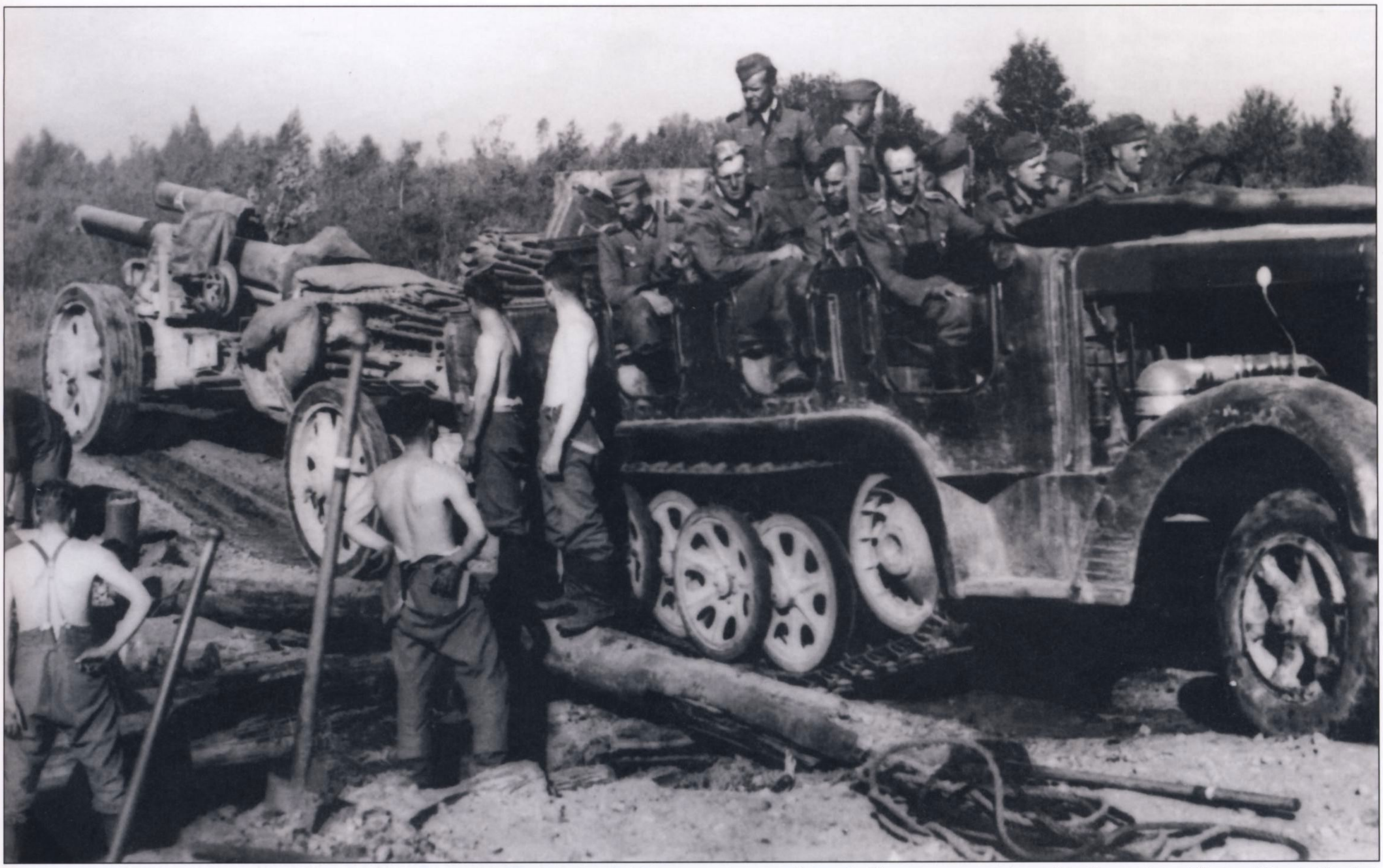
A column of Sd.Kfz.7 half-tracks, each towing a captured French or Belgian Canon de 155 L mle 1917 Schneider. A number of these guns were captured intact in 1940 and impressed into German service as the 15.5cm K 416(f) or (b). The letter 'A' can be seen painted on the back of the gun shield on the first gun on the left and the letter 'B' on the canvas dust cover and back of the gun shield of the second vehicle indicating the position of the gun in the battery.



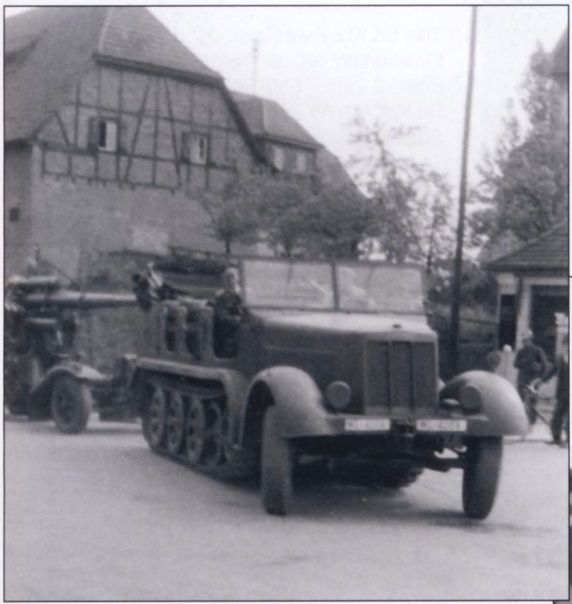
An Sd.Kfz.7 tows the barrel of a 15cm K16 heavy artillery gun, a job normally allocated to the heavier Sd.Kfz.8. Originally used in World War I, small numbers of this gun were used through World War II by the German Army. The smaller diameter all steel wheels have been replaced with rubber tired wheels more suitable for the higher speeds attained with modern artillery tractors.



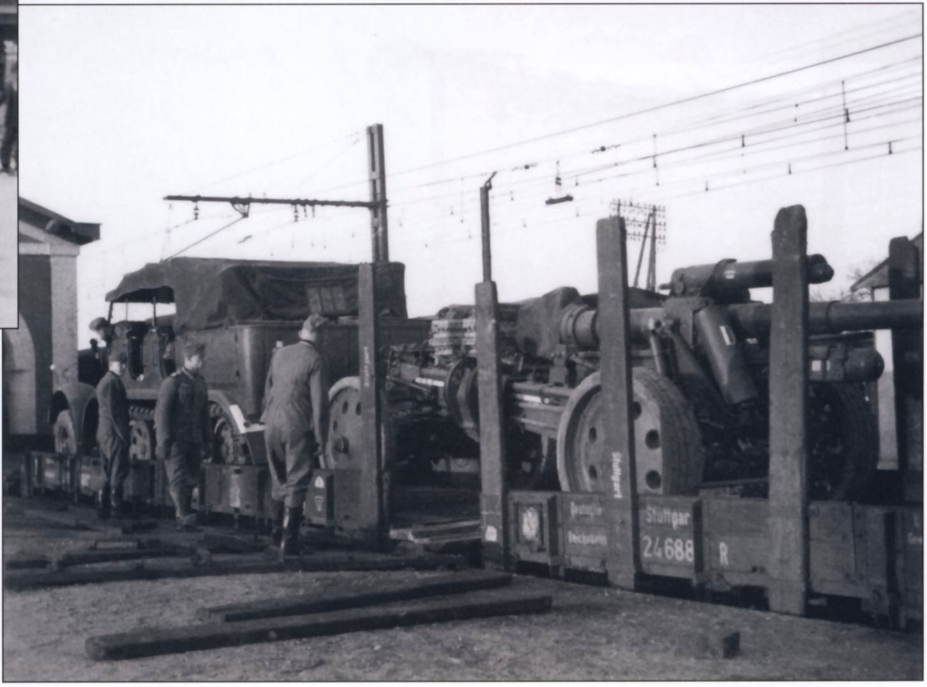
Rail transport was used wherever possible to reduce the wear on vehicle engines and suspensions by the German Army in World War II. Here an Sd.Kfz.7 maneuvers itself and its towed 15.cm sFH18 howitzer aboard a railway wagon at a rail head on a wet, miserable looking day. In the background a MAN 3-ton lorry can be seen.



Another Sd.Kfz.7 tows a 15cm sFH18 howitzer over a temporary log bridge across a small creek. The men are stripped to the waist while working in the hot sun. To improve ventilation of the engine, the sides of the motor compartment have been removed and stowed on the vehicle. The shape of the holes is unique to the Sd.Kfz.7.

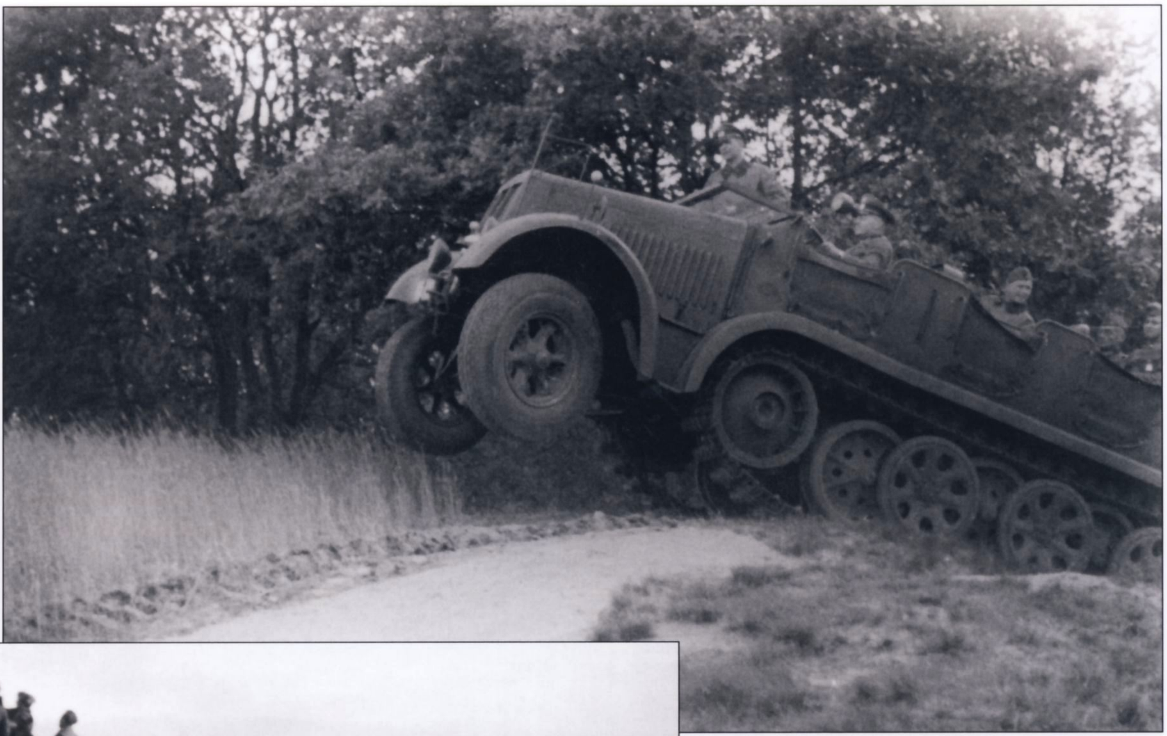


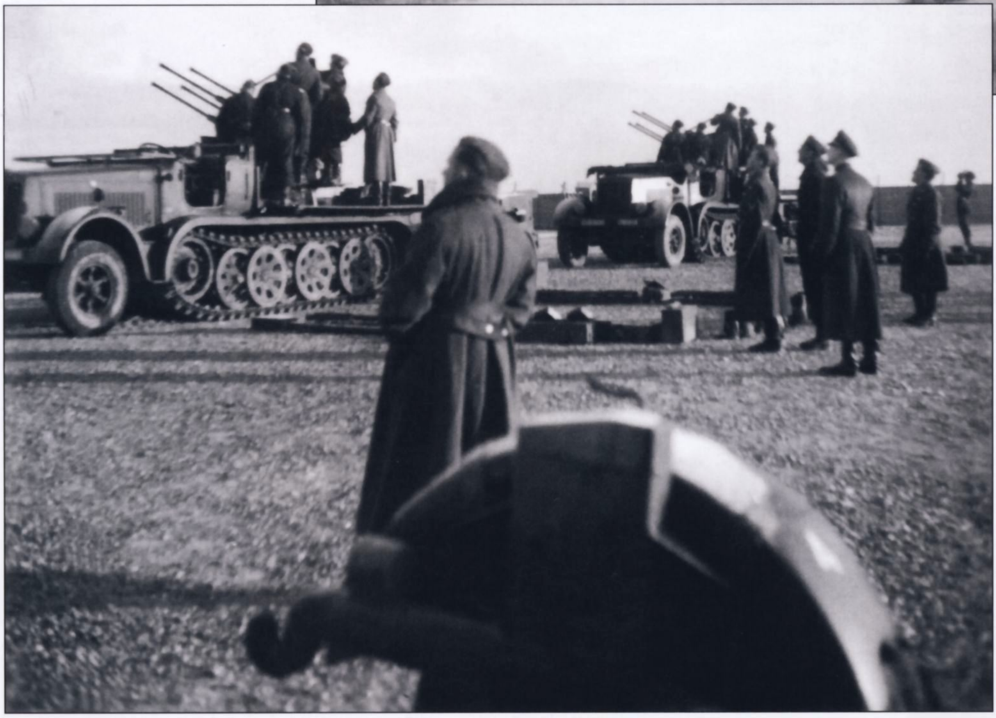
An Sd.Kfz.7 towing an 8.8cm FlaK18 anti-aircraft gun passes through a German town, probably in 1939. The license plate number, 'WL-4204' is painted on both sides of the front bumper in typical fashion and an indistinguishable marking is painted on the right side fender.



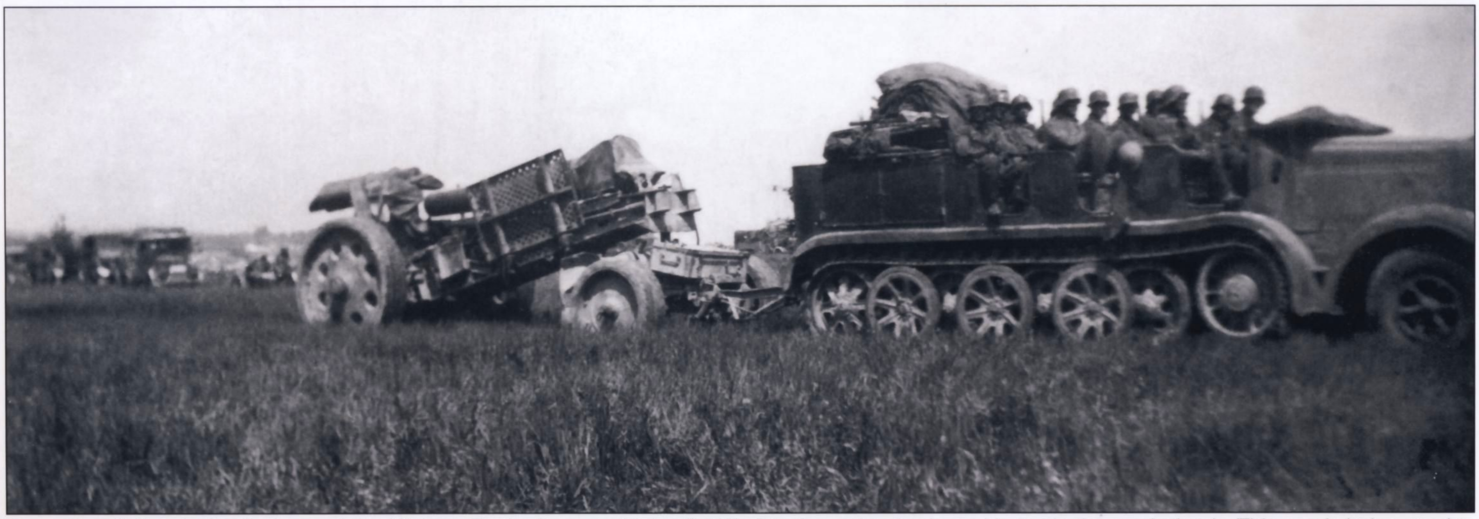
A new looking Sd.Kfz.7 and 15cm sFH18 howitzer have been loaded for rail transport. The combined length of the two units requires the wheels of the gun to be positioned on a second flat car. The letter 'D' indicating the position of the gun within the battery is painted in white on the equilibrator housing.

An Sd.Kfz.7 displays its cross-country capabilities for a group of officers out for a test drive. The pennant frame for a Panzergruppe commander is fitted to the front fender and, although it is unlikely the commander's personal vehicle, it was probably attached to the headquarters company. Over 12,000 units were produced between 1933 and 1944.

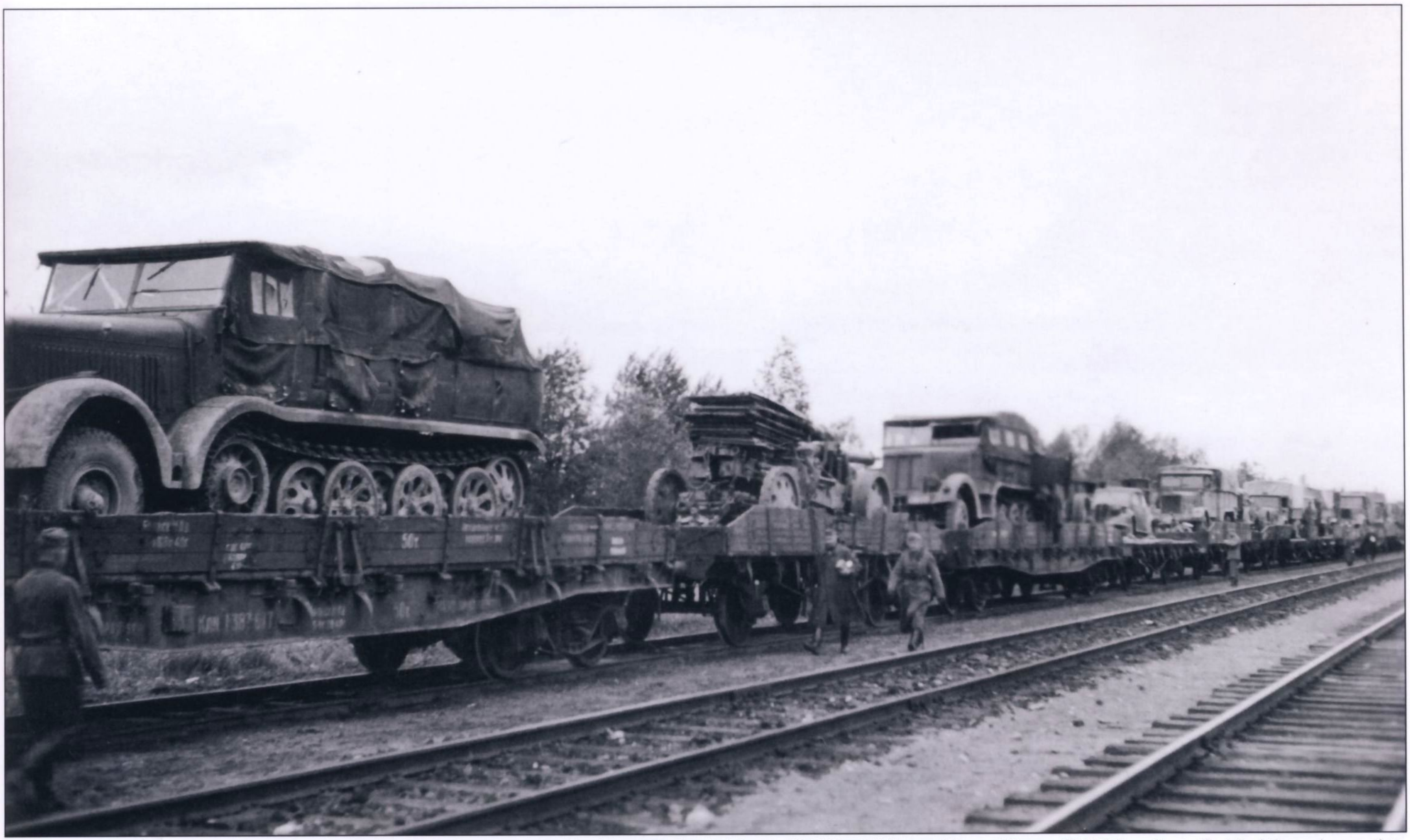




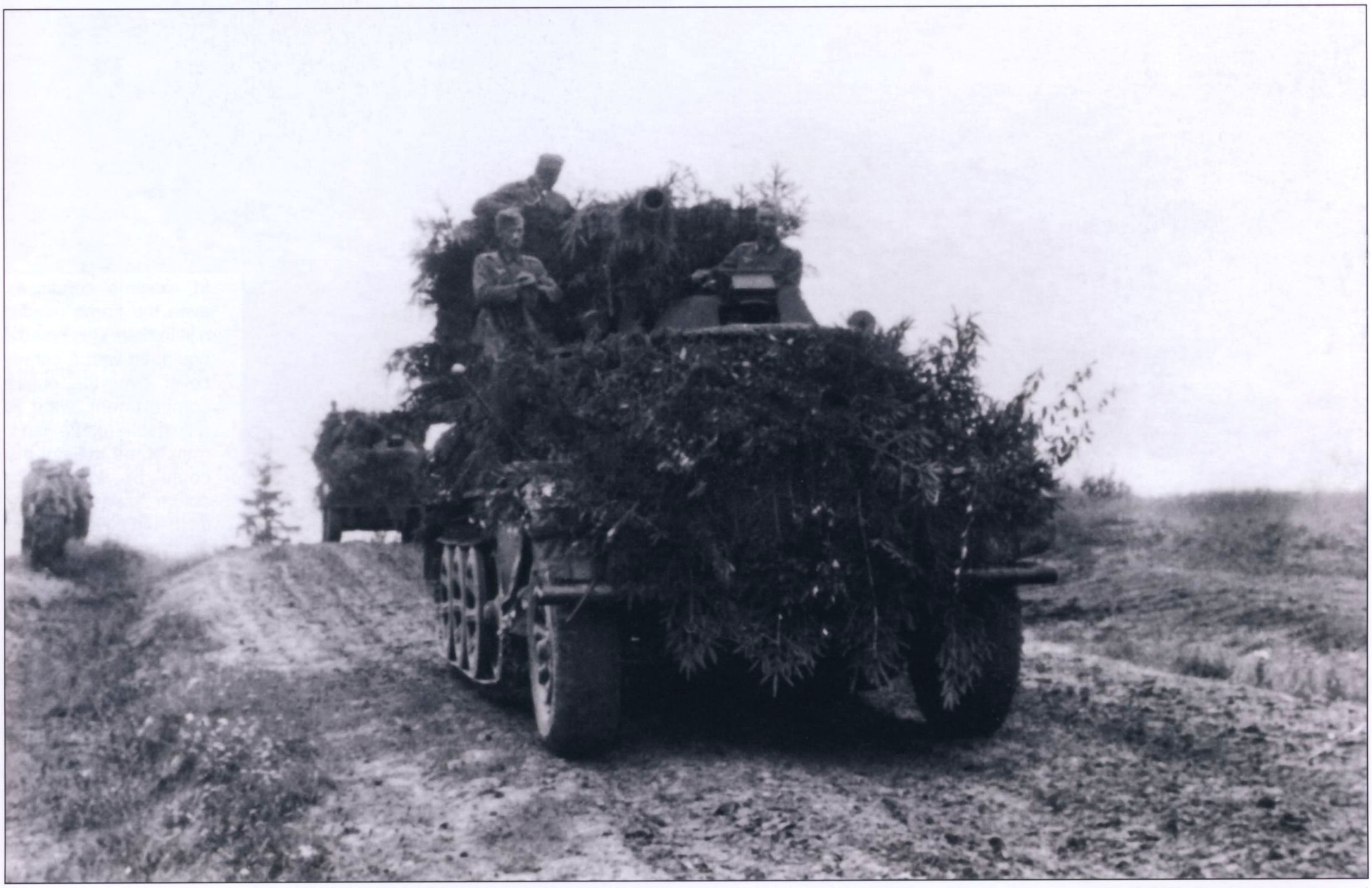
The Sd.Kfz.7 was also used to mount the 2cm Flakvierling 38, designated as the Sd.Kfz.7/1 and 3.7cm FlaK36, designated as the Sd.Kfz.7/2. All eyes are trained skyward as two Sd.Kfz.7/1's prepare to engage enemy aircraft. To the right in the background, a member of the gun crew can be seen with the Entfernungsmesser 34 range finder. The EM34 was normally held in a harness strapped to the observer and used split image optics and triangulation to determine the distance to the target.



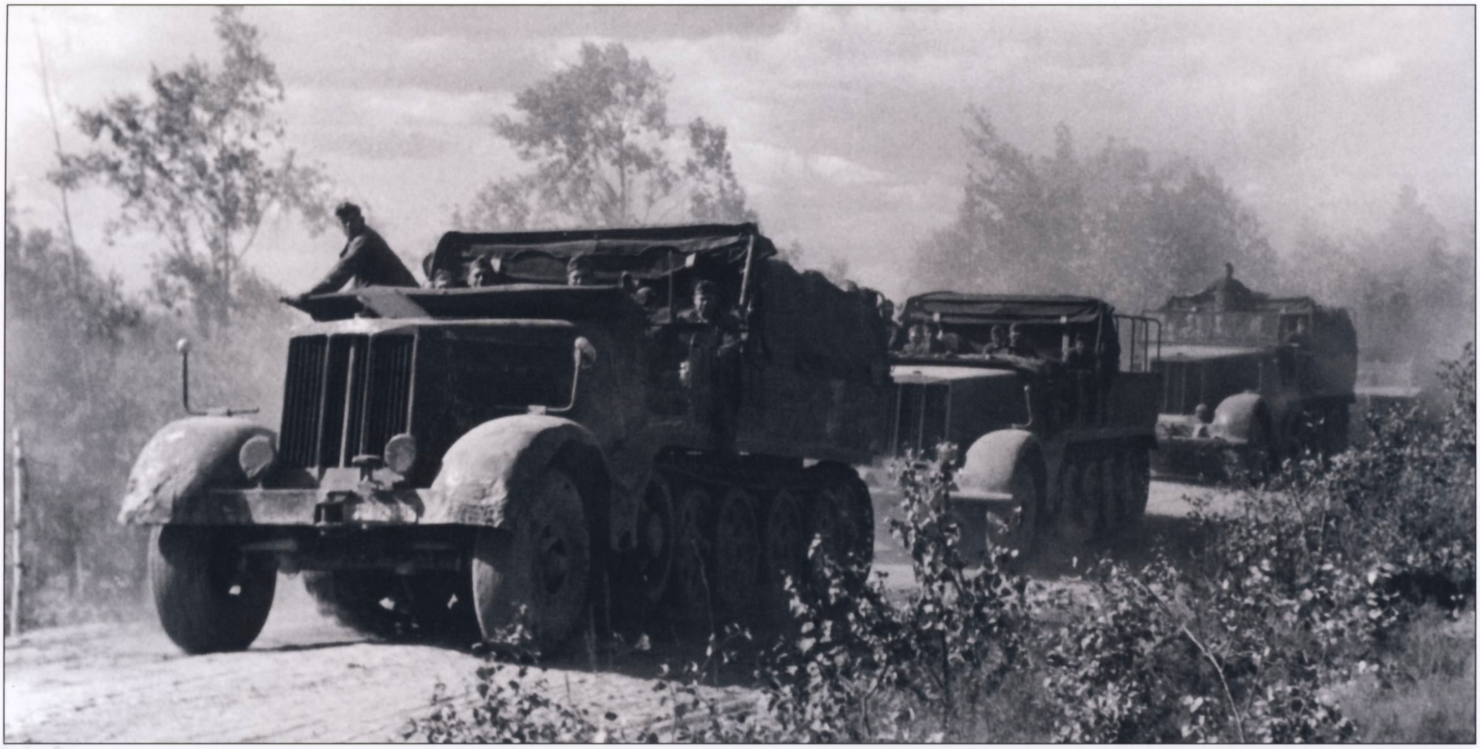
One of the distinguishing features of the Mittlerer Zugkraftwagen 12-ton Sd.Kfz.8 is the eight pie shaped holes in the road wheels. This one is being used to tow the gun carriage of an unidentified large caliber artillery piece. Development of the Sd.Kfz.8 began in 1931 and only about 4,000 units were produced between then and 1944.



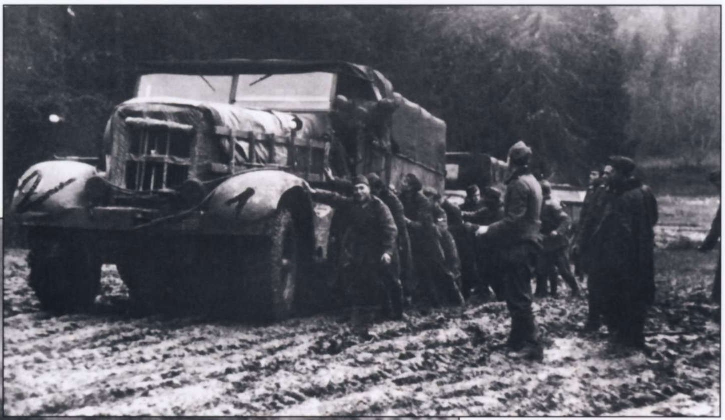
Vehicles of an artillery regiment are loaded for rail transport to the front. To the left is an Sd.Kfz.8 followed by a 15cm sFH18 howitzer. Behind them is another Sd.Kfz.7 and 15cm sFH18 followed by a staff car, a MAN 3-ton lorry and a variety of other transport vehicles.



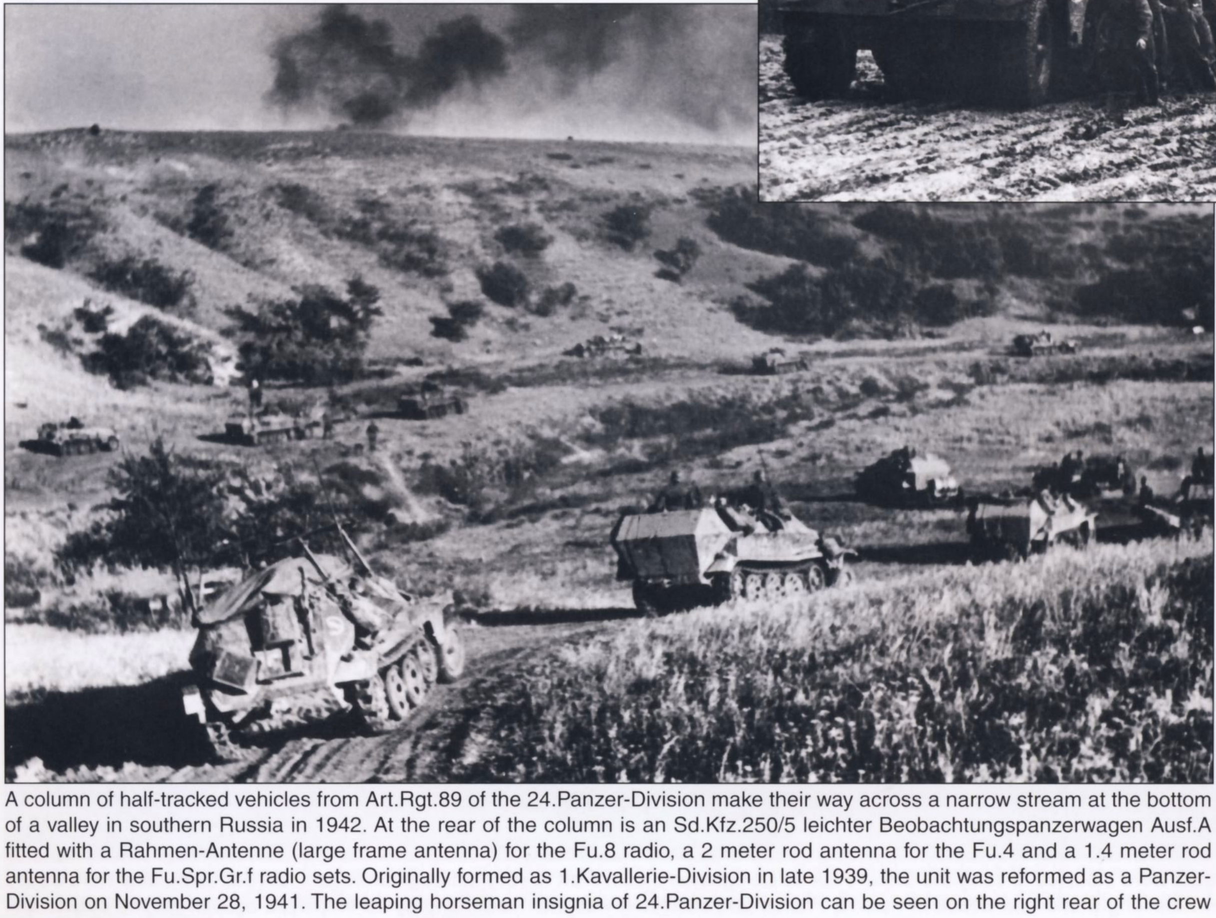
In 1939, ten Sd.Kfz.8 half-tracks were modified to carry the 8.8cm Flak18. Designated 8.8cm FlaK18 (Sfl) auf Zugkraftwagen 12t (Sd.Kfz.8), they were issued to 1.Kompanie/Panzer-Jäger-Abteilung 8 and saw action in Poland, France and Russia. It was intended that they be employed against ground targets and because of this, elevation of the gun was restricted to 15 degrees.



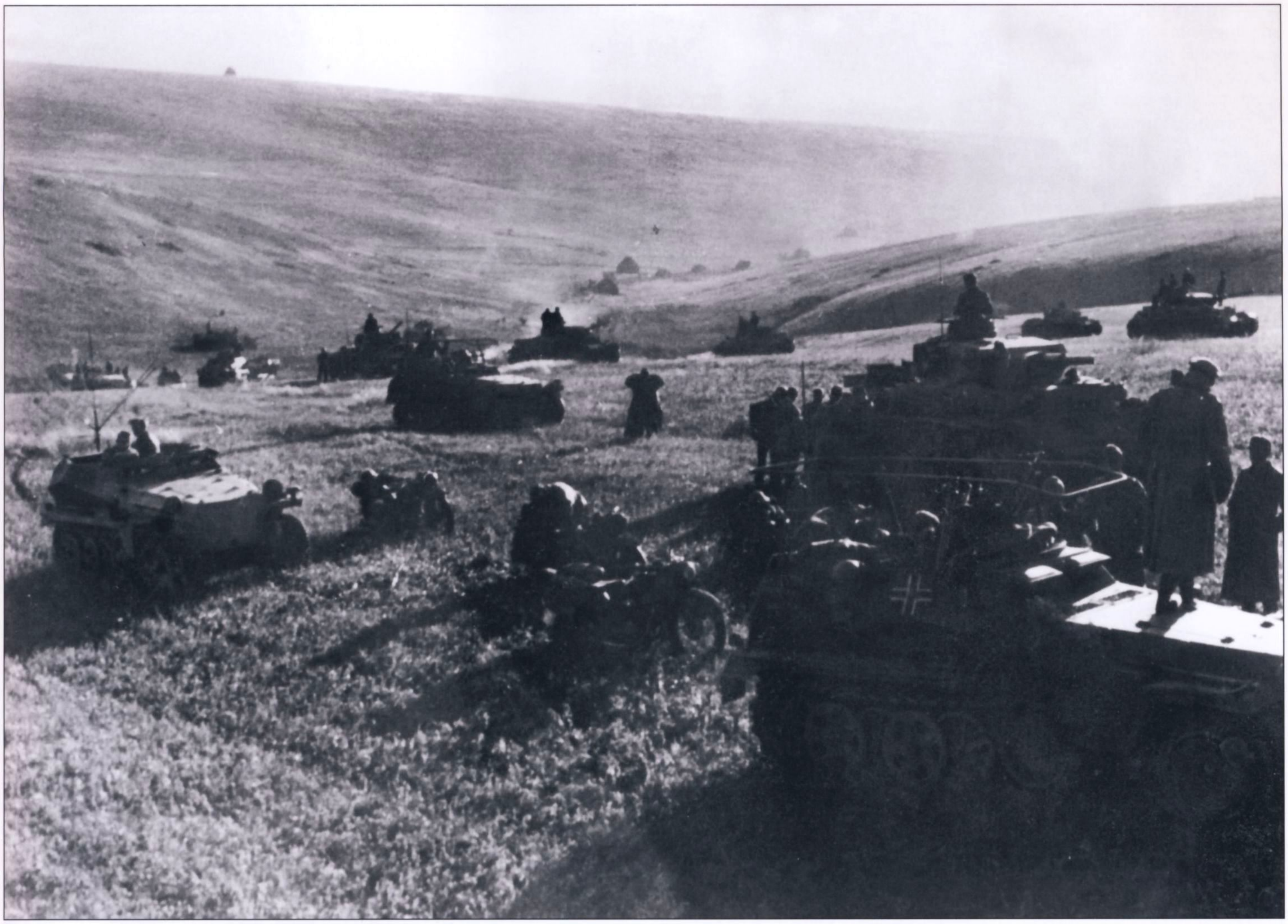
The largest half-track produced by Germany was the Schwerer Zugkraftwagen 18-ton Sd.Kfz.9, often referred to as the 'Famo' after the name of the production facility. It was designed primarily for tank recovery and for towing heavy trailers and the huge 21cm and 24cm artillery pieces. Under normal conditions, three Famos were required to tow a Tiger I.



In extreme conditions, even the Famo needed a little help. This Famo is equipped with a canvas cover over the engine compartment with an adjustable roll-up flap in front of the radiator that could be lowered in colder weather. An insulated cover has also been placed over top to help retain engine heat. A wooden ladder has been stowed on top of the left fender against the engine compartment. Unfortunately, the markings on the fenders have been censored out.

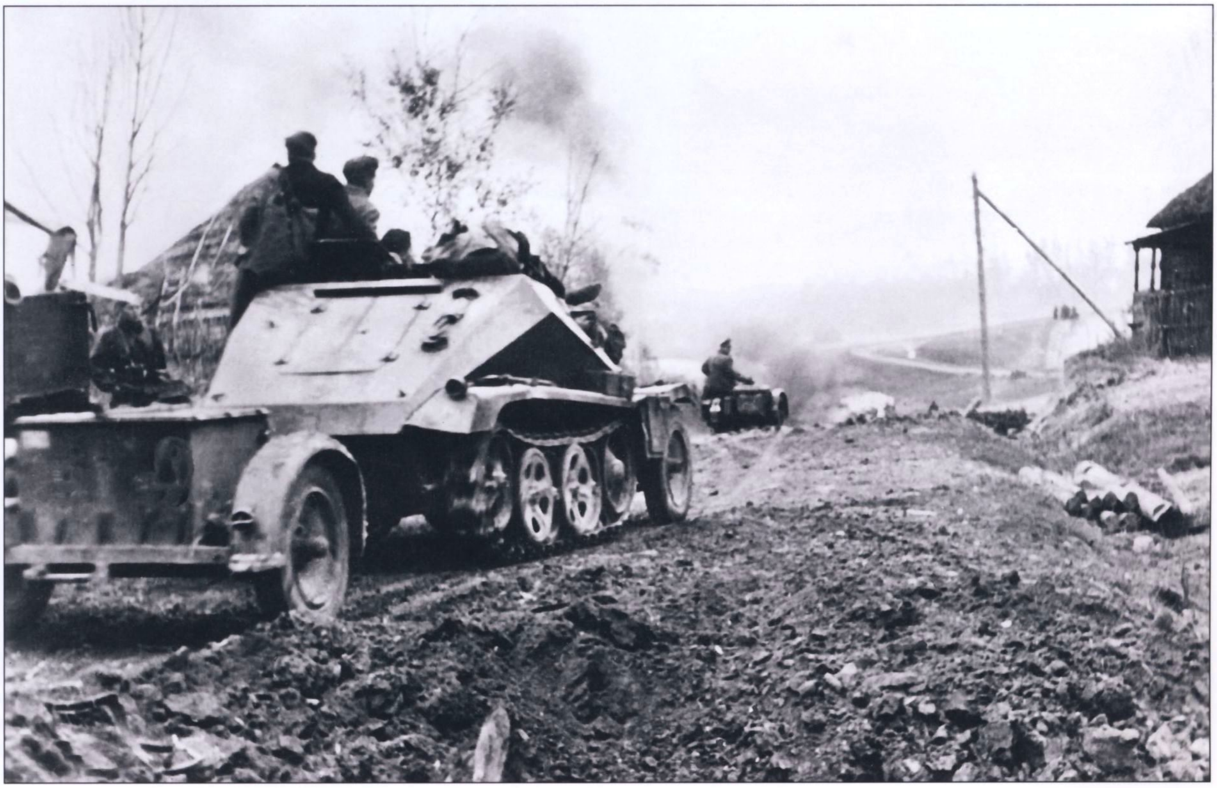


A column of half-tracked vehicles from Art.Rgt.89 of the 24.Panzer-Division make their way across a narrow stream at the bottom of a valley in southern Russia in 1942. At the rear of the column is an Sd.Kfz.250/5 leichter Beobachtungspanzerwagen Ausf.A fitted with a Rahmen-Antenne (large frame antenna) for the Fu.8 radio, a 2 meter rod antenna for the Fu.4 and a 1.4 meter rod antenna for the Fu.Spr.Gr.f radio sets. Originally formed as 1.Kavallerie-Division in late 1939, the unit was reformed as a Panzer-Division on November 28, 1941. The leaping horseman insignia of 24.Panzer-Division can be seen on the right rear of the crew compartment.

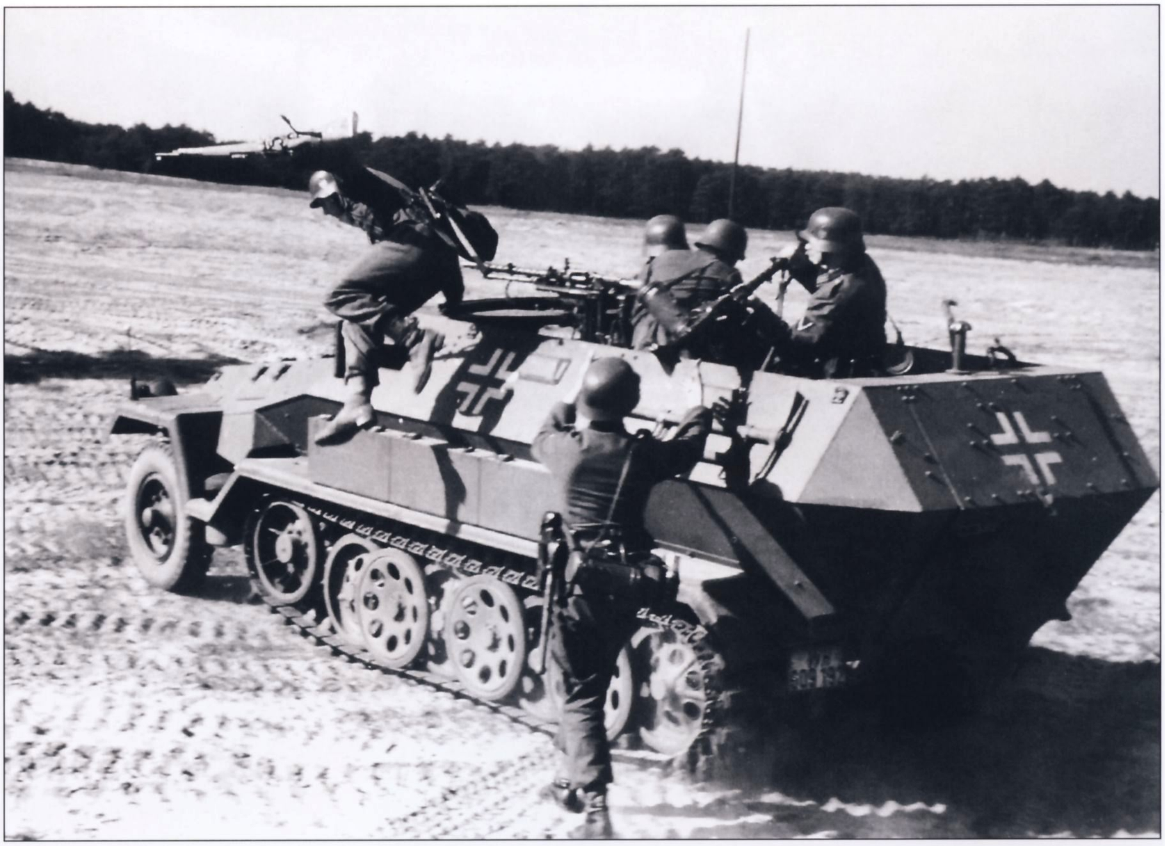


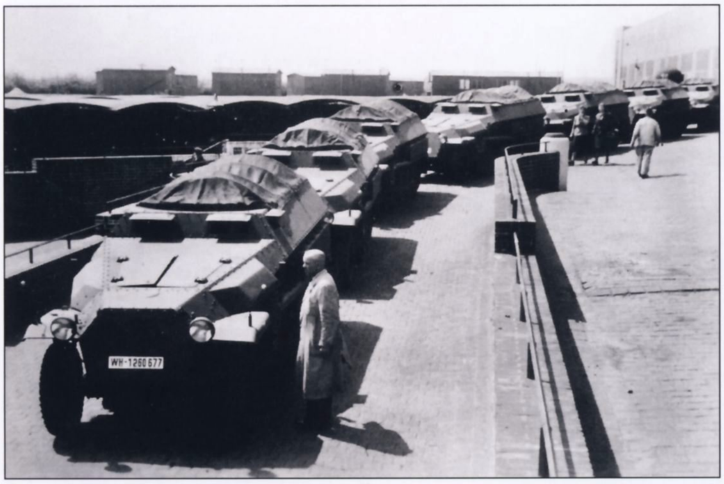
A battle group of light armored half-tracks, Pz.Kpfw.III's and Pz.Kpfw.IV's pause on the side of a shallow valley before advancing somewhere on the Eastern Front in the summer of 1942. Two Sd.Kfz.250/3 leichter Funkpanzerwagen Ausf.A, identifiable by their frame antennae, can be seen along with another Sd.Kfz.250/3 that has been fitted with either an 8 meter or 9 meter Kurbelmast, a telescoping mast antenna normally used for Luftwaffe ground-to-air communications with the Fu.7 and Fu.8 radio sets. Photos of this arrangement are extremely rare and likely the result of a field modification.

A leichter Gepanzerte Munitionskraftwagen Sd.Kfz.252 towing the Sd.Ah. 3 1/1 ammunition trailer makes its way through a Russian village. They were developed along with the Sd.Kfz.253 to support the Sturmartillerie units. The rear of the crew compartment was angled to compensate for the thicker frontal armor plates and roof and to reduce the weight on the chassis. A total of 413 vehicles were produced between June 1940 and September 1941, at which time it was replaced by the Sd.Kfz.250/6.

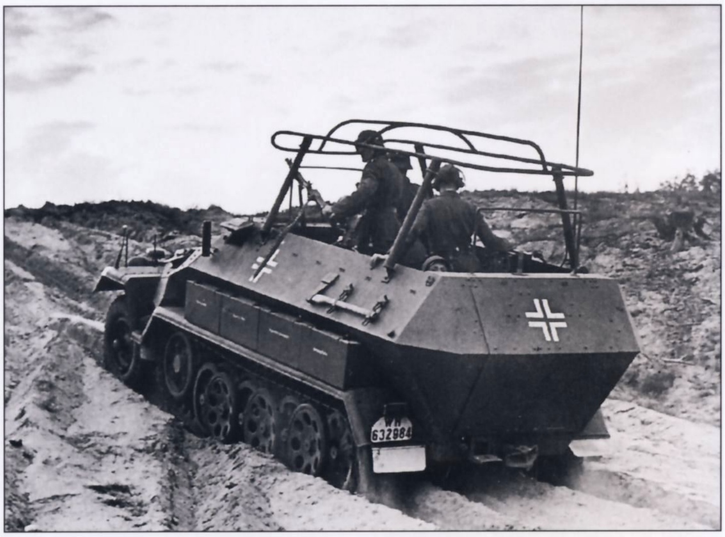


This Sd.Kfz.251/1 Ausf.A engaged in a training exercise can be identified by the straight fenders and three visors fitted to each side of the crew compartment. Early vehicles were not fitted with a shield for the forward MG34. The tactical sign for a Panzer-Division, a white outline rhomboid can be seen painted in white on the rear of the vehicle followed by two numbers separated by a diagonal line, likely denoting the company and vehicle number within the company.



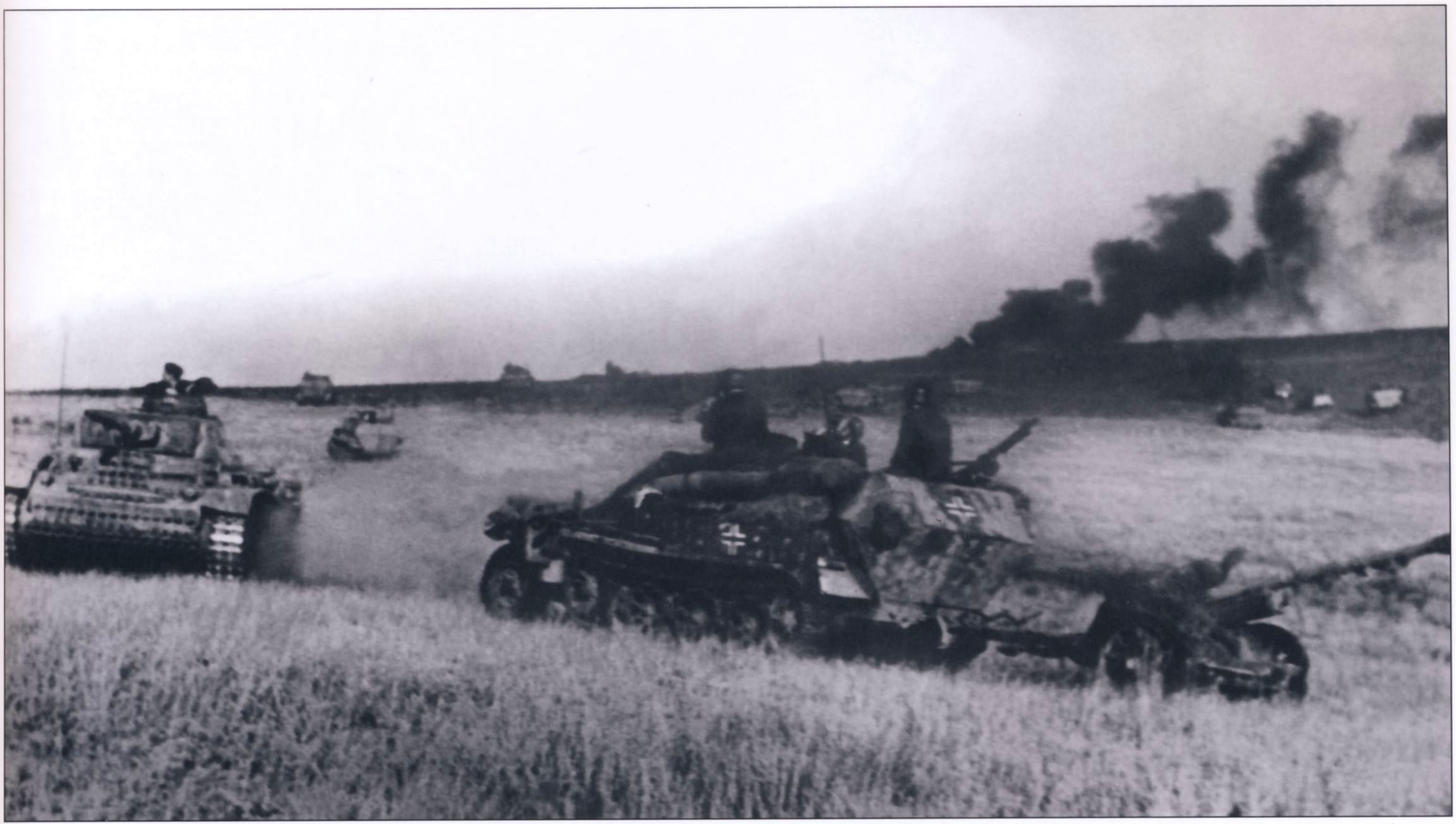


Brand column of new Sd.Kfz.251/1 Ausf.C leave the manufacturer's plant. They all have riveted hulls which were less common than the welded type and necessitated by increased production demands. Each one has been fitted with a canvas cover over the crew compartment supports by steel hoops supported on each side.

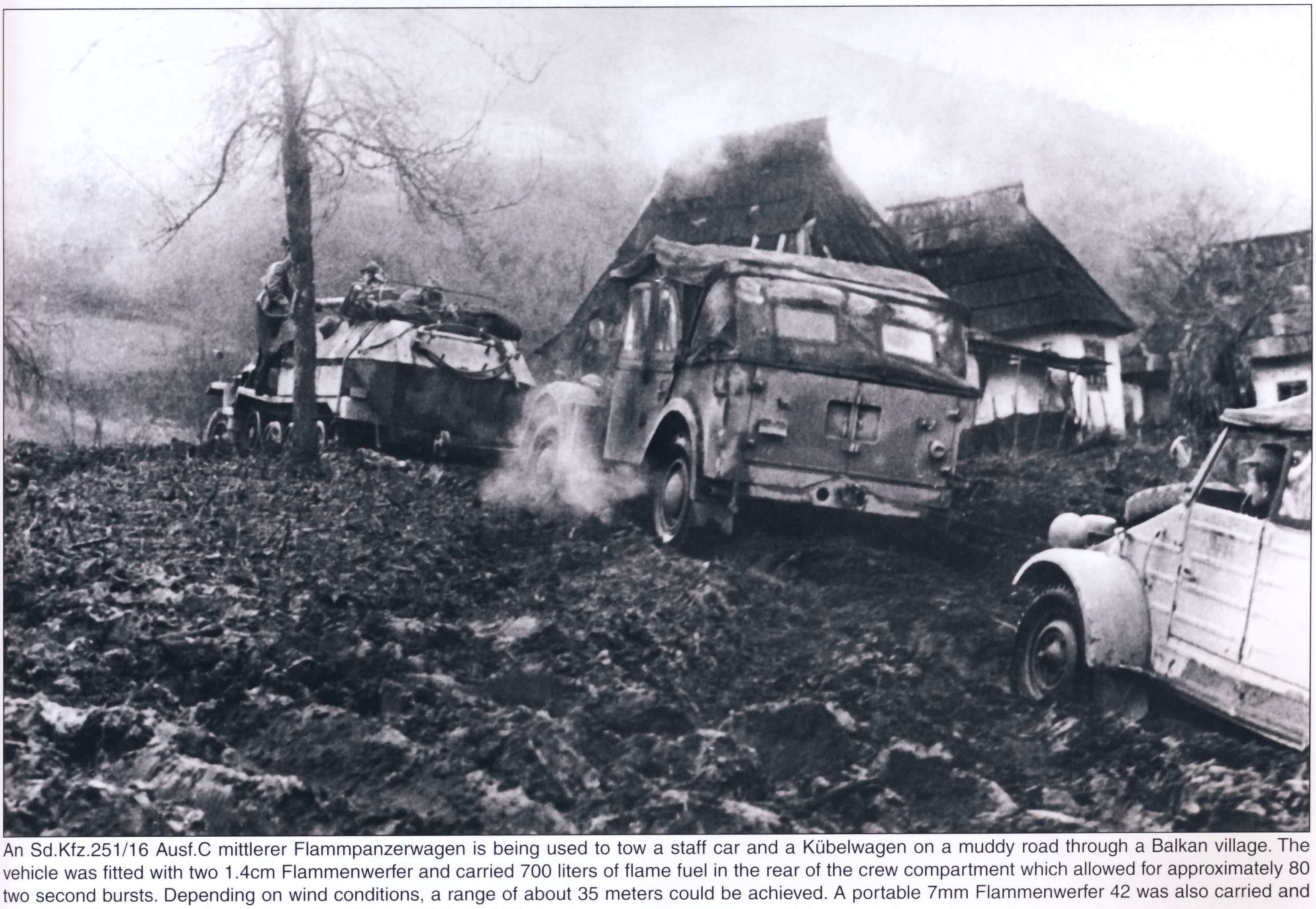


An Sd.Kfz.251/3 Ausf.B mittlerer Funkpanzerwagen plows its way through soft sandy ground that would have stopped most wheeled vehicles, demonstrating the advantages of these half-tracks. The Ausf.B also featured the straight fender and can be identified by the lack of visors in the sides of the crew compartment. Normally, only three storage lockers were mounted on each fender and some units applied stenciled markings to indicate the contents of each.

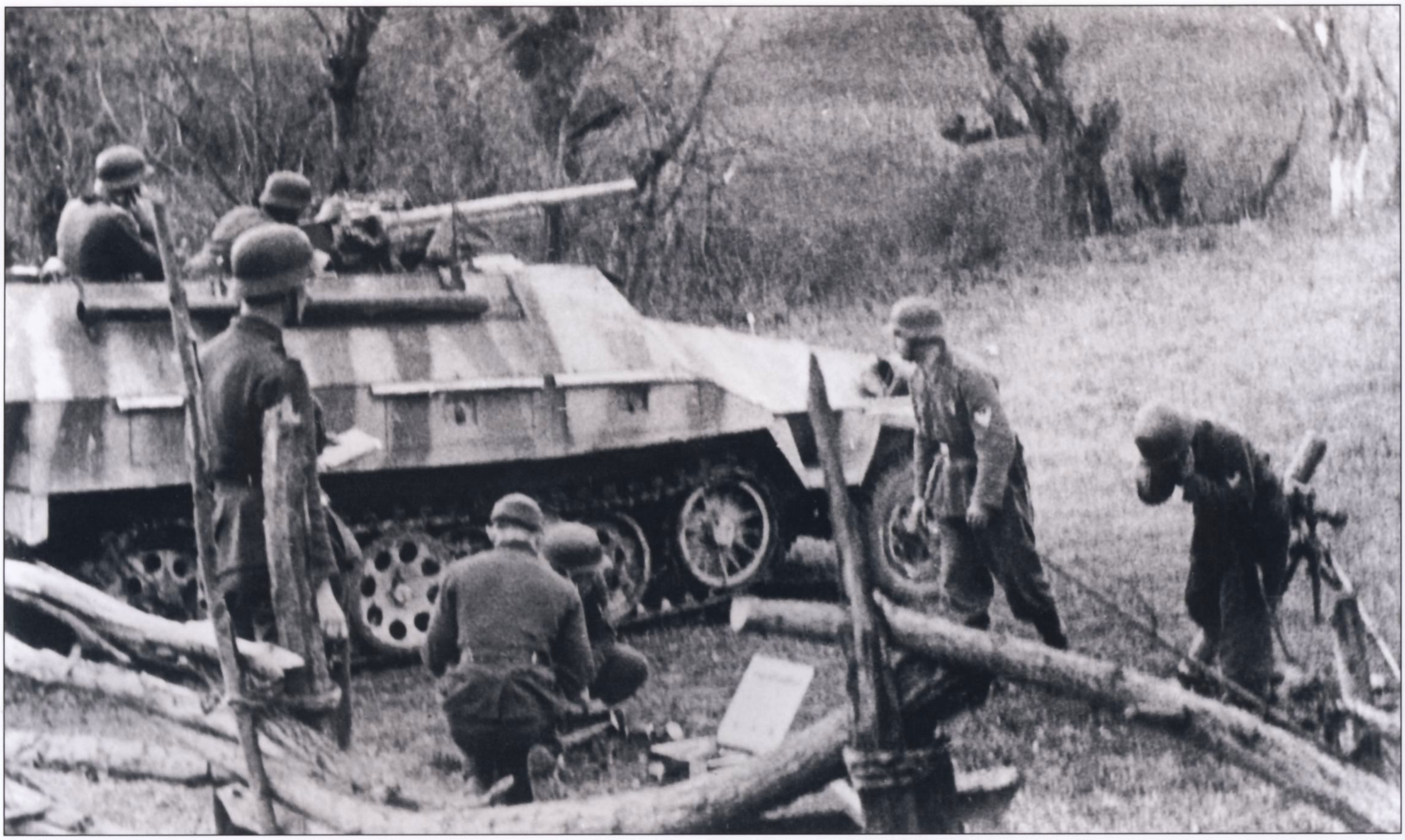
Another mixed battle group of tanks and half-tracks pauses at the top of a steep embankment. On the right is an Sd.Kfz.251/3 Ausf.C that has been fitted with an armored housing on the right rear of the crew compartment as protection for the porcelain base for the 2 meter star antennae.



This Sd.Kfz.251/1 Ausf.C is seen towing a 5cm Pak38 anti-tank gun somewhere in Russia. The front of the fenders was raised over the drive sprockets to provide more clearance and the stowage lockers moved to the still horizontal rear section. A Pz.Kpfw.III Ausf.J mounting the 5cm Kwk39 L/60 gun can be seen to the left.

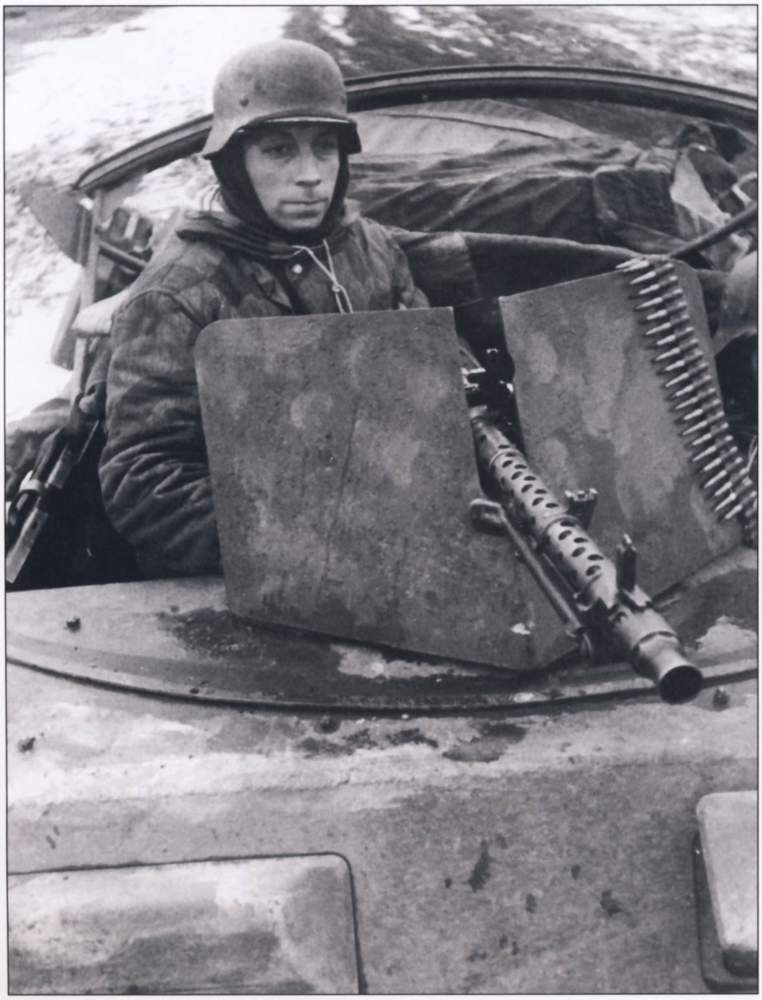


An Sd.Kfz.251/16 Ausf.C mittlerer Flammpanzerwagen is being used to tow a staff car and a Kübelwagen on a muddy road through a Balkan village. The vehicle was fitted with two 1.4cm Flammenwerfer and carried 700 liters of flame fuel in the rear of the crew compartment which allowed for approximately 80 two second bursts. Depending on wind conditions, a range of about 35 meters could be achieved. A portable 7mm Flammenwerfer 42 was also carried and was fed with a 10 meter hose stowed on the rear of the vehicle.



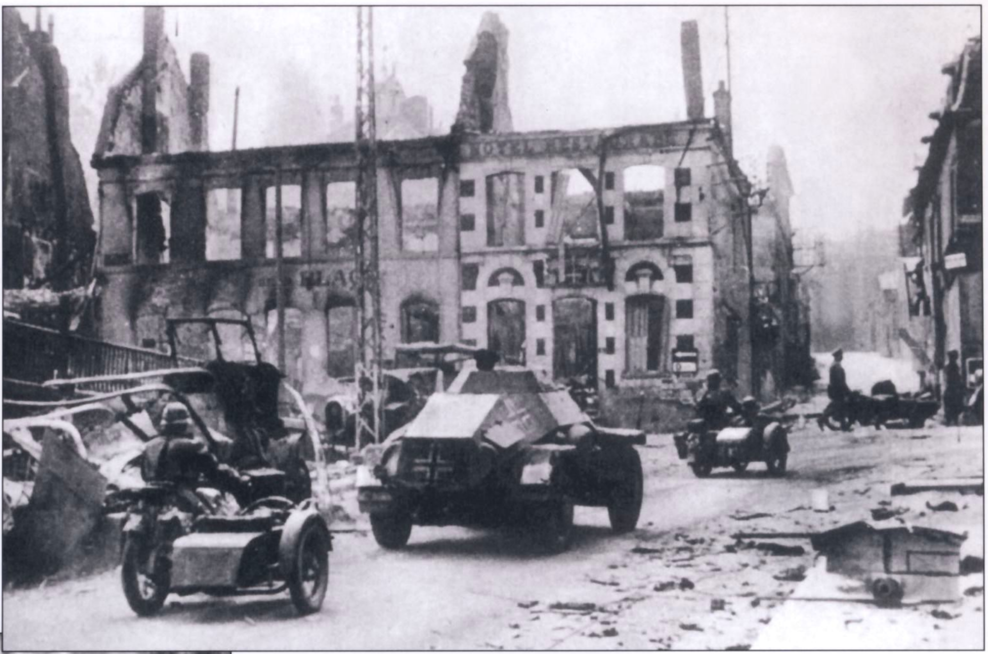
An Sd.Kfz.251/10 Ausf.D provides covering fire for the crew of an 8cm Gr.W 42 mortar. It is armed with the obsolete 3.7cm PaK35/36 L/45 and was issued to platoon leaders to provide heavy fire support. At first glance, it appears that an 8.8cm Raketenpanzerbuchse 54 is hanging on the side of the hull but the length of tube is too long and other details missing that would identify it as such.

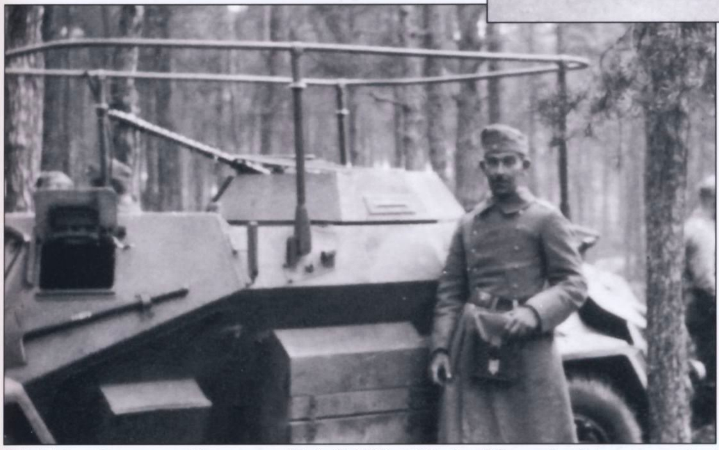
Two Panzergrenadiers pose for a picture in front of their Sd.Kfz.251/1 Ausf.D loaded on a railway wagon for transport to the front. The hull was redesigned to reduce the number of plates required and simplify production. Production of the Ausf.D began in September 1943 and a total of 10,602 vehicles were produced by the end of the war.



A Panzergrenadier, wearing the Army pattern reversible camouflage winter suit with the splinter pattern exposed, mans an MG34 mounted in an Sd.Kfz.251. Behind him can be seen the folding canvas cover and curved front support hoop. The curved rail that was normally fitted in front of the MG shield is missing leaving the mounting strip in place.

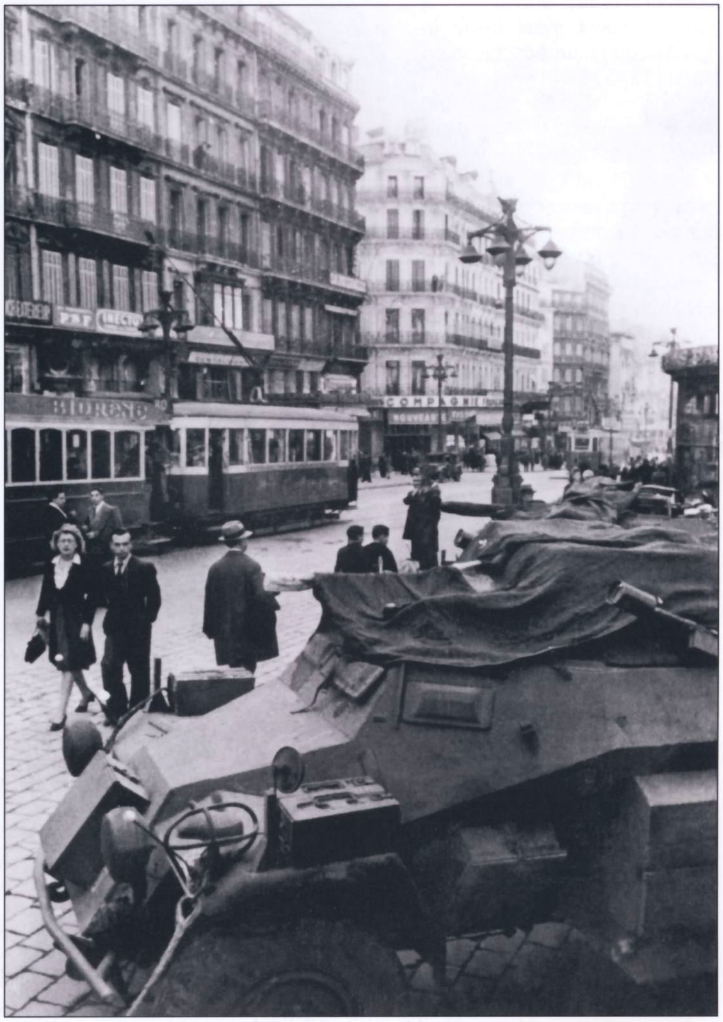
A leichter Panzerspähwagen Sd.Kfz.221 accompanied by two motorcycle combinations, approaches a destroyed hotel and restaurant in a French city in May 1940. Developed in 1934 as a reconnaissance vehicle, it was issued to the Aufkl.Abt. of motorized infantry and Panzer divisions. It was armed with a single MG34 mounted in a rotating turret and from 1942 onwards, a 2.8cm s.Pz.B.41.



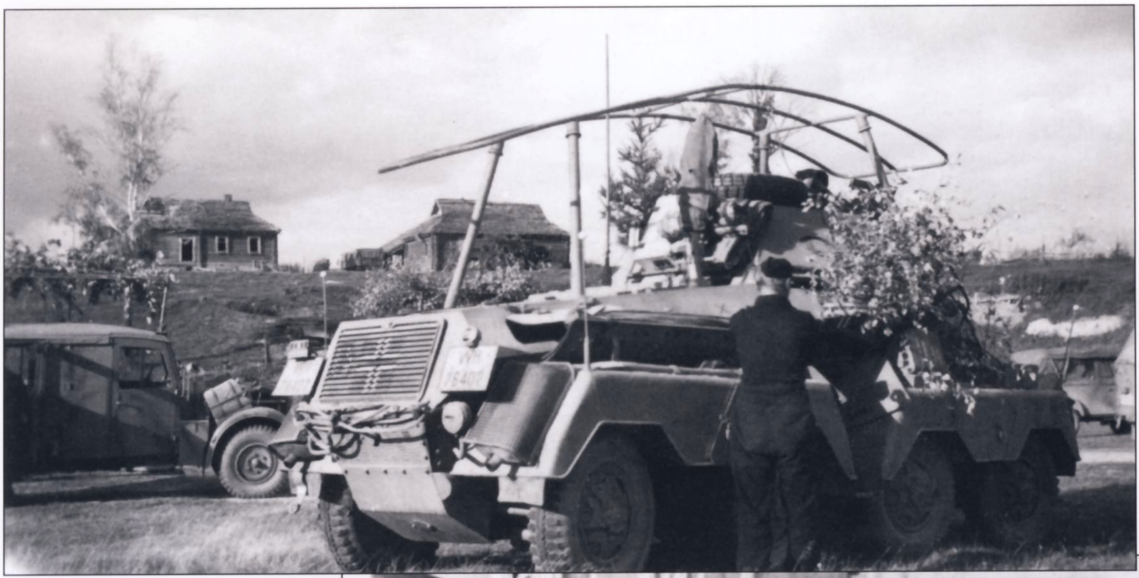


A leichter Panzerspähwagen (Fu) Sd.Kfz.223 Ausf.B parked in a wooded area, probably in northern Russia. It was also issued to the Aufkl.Abt. of motorized infantry and Panzer divisions and was fitted with either a Fu.Spr.Ger. 'a' and a Fu.12 radio set or an Fu.10 for long range communications. A large rectangular frame antenna was mounted on four supports and could be folded down when not in use. For protection it carried an MG34 in a small rotating turret. A total of 567 vehicles were produced for the German Army from 1935 to February 1944.

The leichter Panzerspähwagen (2cm) Sd.Kfz.222 was fitted with a larger turret to mount a 2cm KwK30 or 38 automatic gun along with a coaxial MG34. A large anti-grenade screen was mounted on the turret that was hinged on each side. They were normally used along with the Sd.Kfz.223 to provide support fire when needed. A total of 990 vehicles were produced for the German Army from 1937 to February 1944 when its duties were assumed by the newer Sd.Kfz.234 series of armored cars.

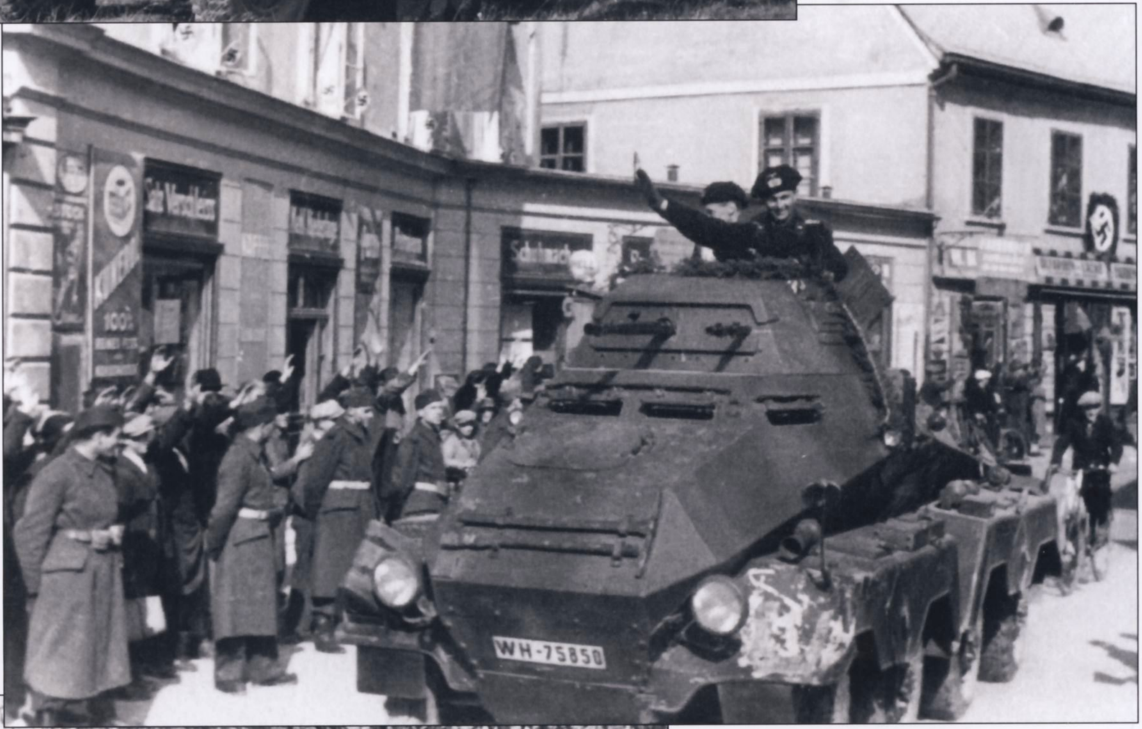


A pair of Sd.Kfz.222 Ausf.B armored cars stand guard on a French street during the occupation. The nearest vehicle displays a number of interesting variations, the most unusual of which is the brush guard protecting the Notek light and the fender mounted turn signal indicators, both of which are late features. The crew has also mounted two smoke dischargers on the turret, an extra stowage box on the front plate that partially covers the license plate and two boxes of MG34 ammunition on each fender.

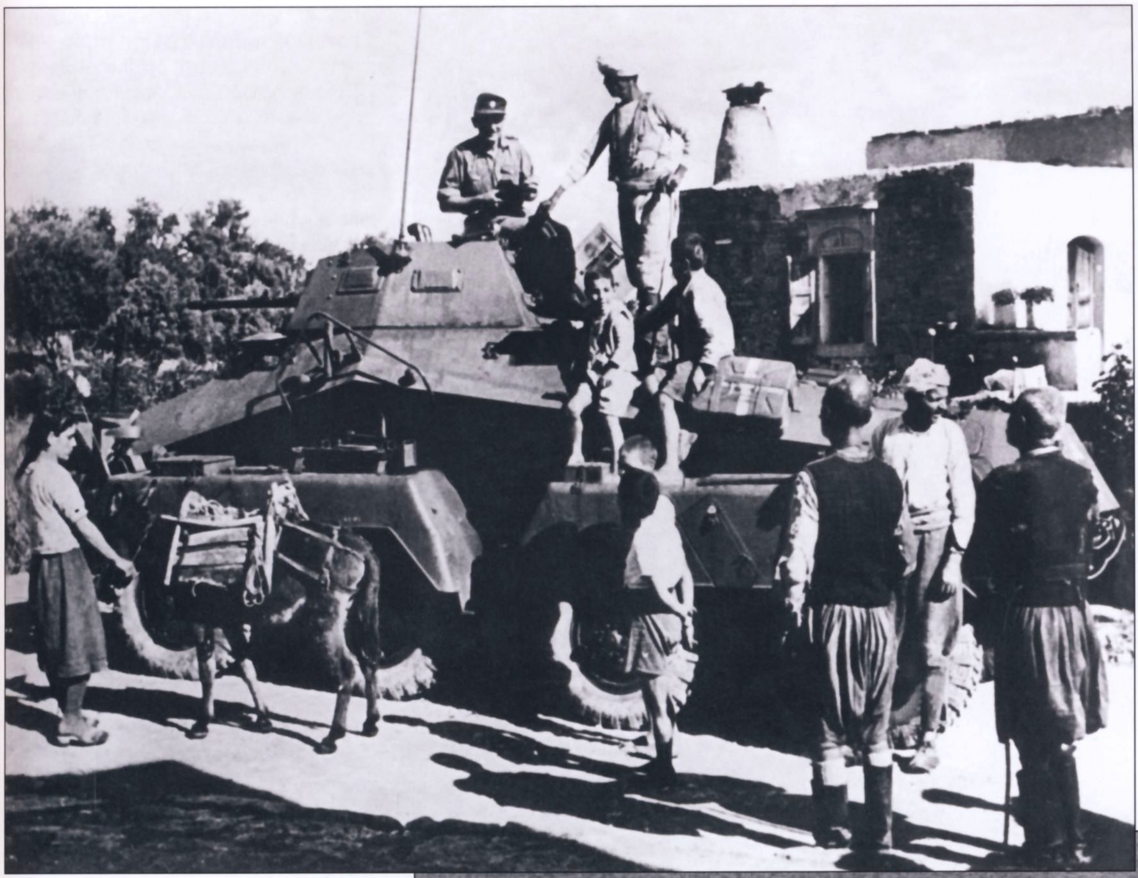


The Panzerfunkwagen Sd.Kfz.263 8-Rad utilized the same chassis as the Sd.Kfz.231/232 but was fitted with a larger crew compartment instead of a turret. It mounted a large frame antenna on top of the hull and also a 9 meter telescoping mast antenna for long range communications. They were issued to the Nachrichten units of motorized infantry and Panzer divisions. Only 207 were produced to January 1943.

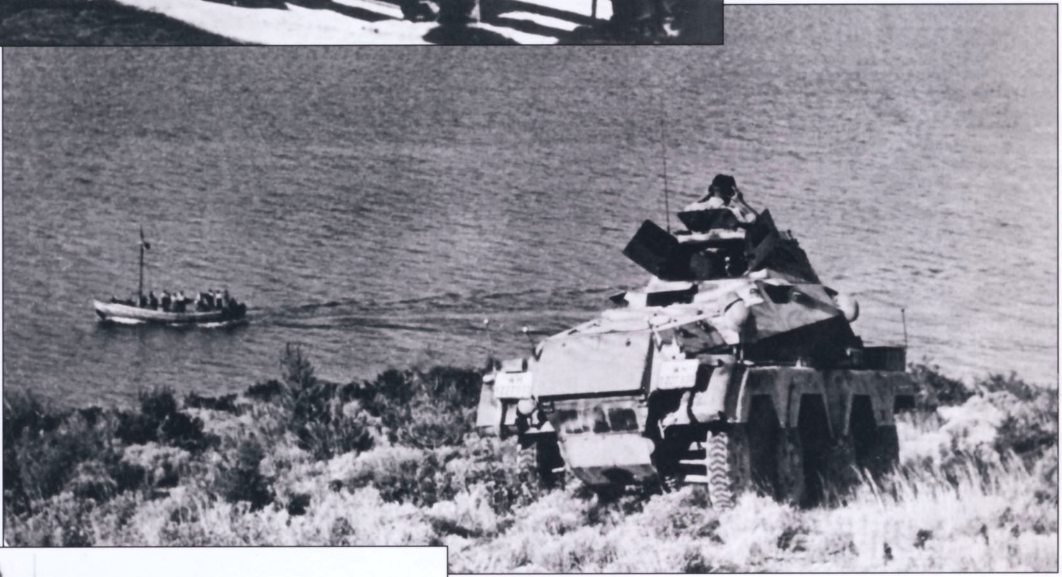
A crew member of a Schwerer Panzerspähwagen Sd.Kfz.233 (changed to Sd.Kfz.231 in October 1939) waves to a jubilant crowd most likely in Austria during the Anschluss on March 12, 1938. It was armed with a 2cm KwK30 or 38 and one coaxial MG34. They were issued to the heavy detachment of the Aufkl.Abt. of motorized infantry and Panzer divisions to provide support for the lighter armored cars. They were produced from 1936 until May 1942 although the radio version, the Sd.Kfz.232 continued to be built until September 1943.



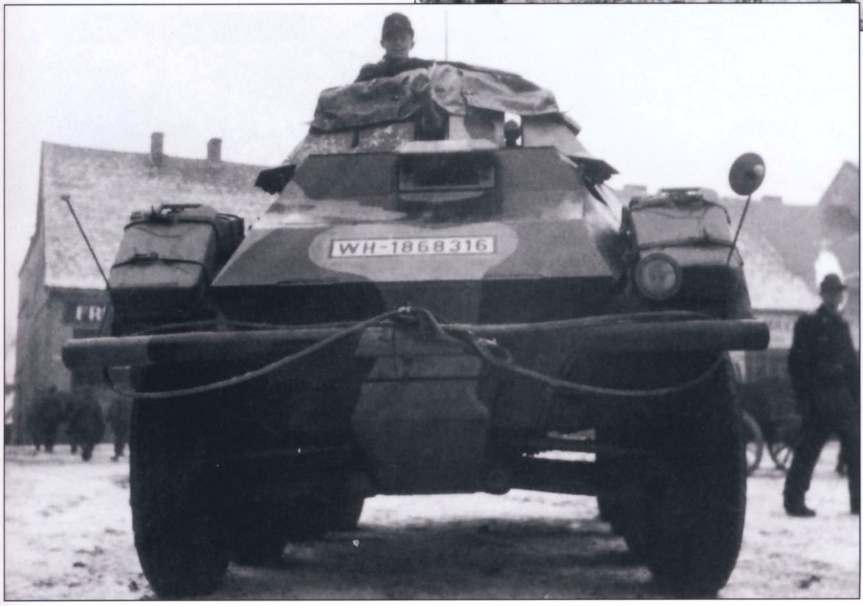
Two foliage laden Schwerer Panzerspähwagen Sd.Kfz.231 travel down a tree lined country road, possibly in France in 1940. Although concealed by the foliage, this vehicle has been fitted with the additional armor plate, called Zusatzpanzer, mounted on a frame attached to the front of the hull. The Notek light, normally mounted on the left side of the Zusatzpanzer has been moved to the top and can be seen through the foliage.



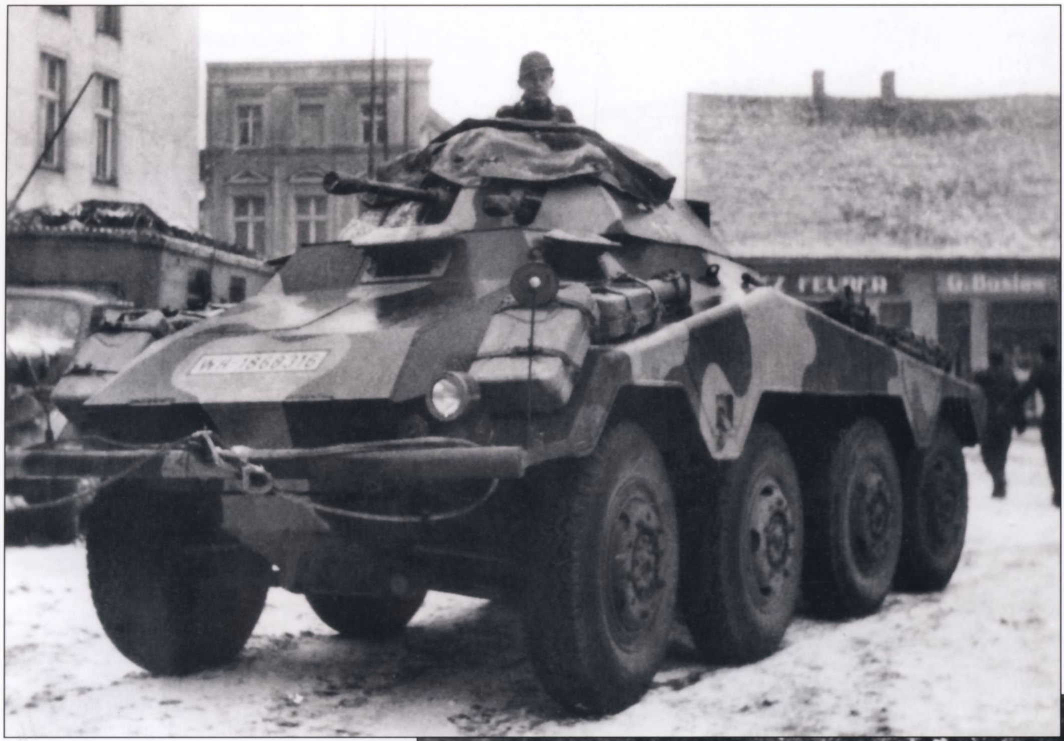
Another Schwerer Panzerspähwagen Sd.Kfz.231 seen in North Africa. It is fitted with the cast visors on the turret introduced in 1938/39 and has the armored cowl on the rear to protect the radiator. Initially, the Sd.Kfz.231 was not fitted with a radio but was later modified to carry one as can be seen by the antenna mounted on the turret.



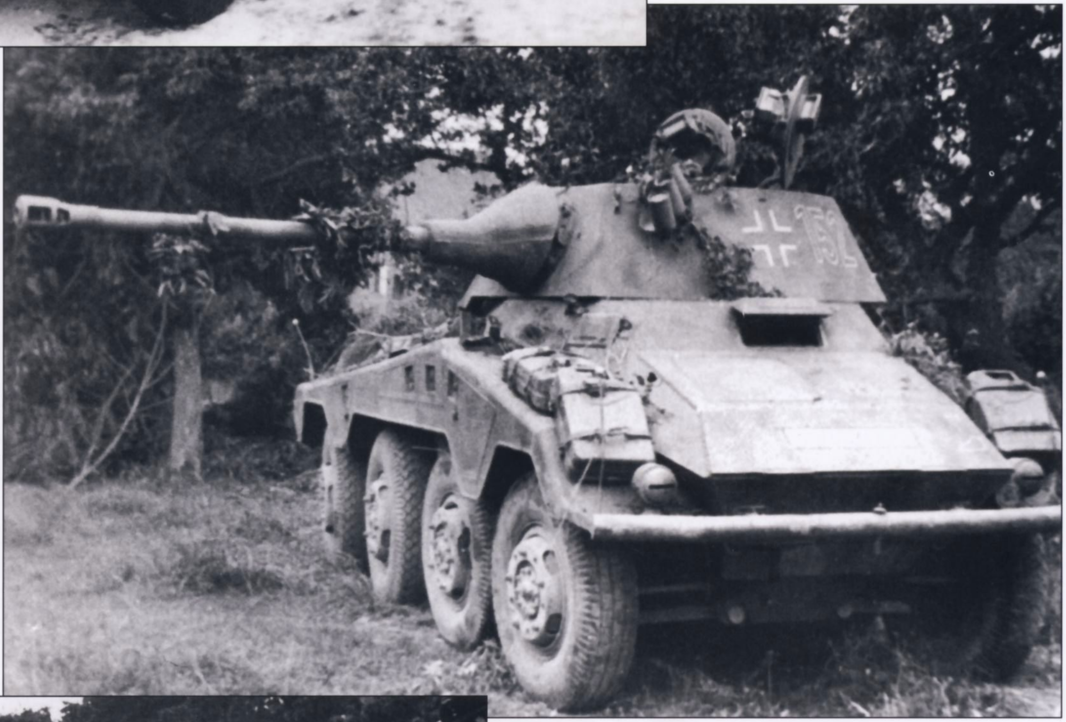
A late production Schwerer Panzerspähwagen Sd.Kfz.231 seen in Greece. The shape of the rear plates was modified and an armored cowl installed on the rear to protect the radiator. Cast visors began to be installed in 1938/39 and the shape of the fenders was also modified to provide more space above the wheels and the front projection was shortened.



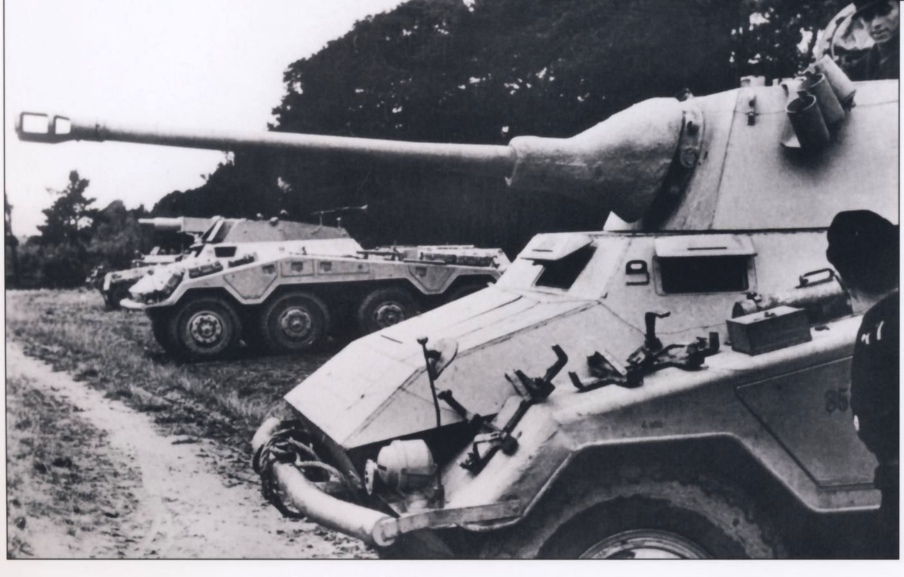
A new Schwerer Panzerspähwagen (2cm) Sd.Kfz.234/1 from Pz.Aufkl.Abt.4 of the 4.Panzer-Division in Danzig, now Gdansk, in Poland in January 1945. Design of this vehicle began in August 1940 and was to incorporate a new six-sided turret called the 'Hänglafette'. Due to delays in design, the first vehicles were not delivered until June 1944.



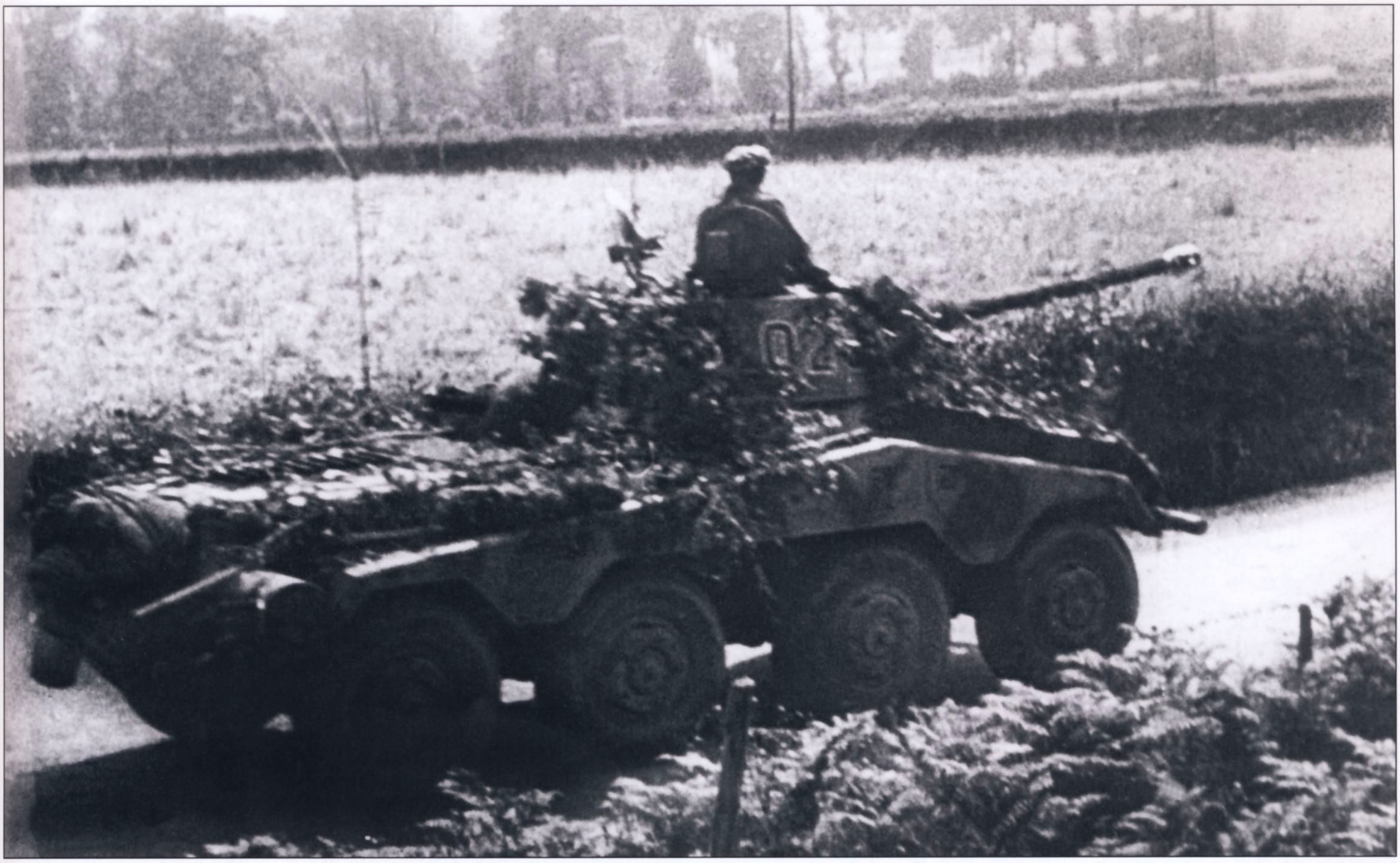
Another view of the new Schwerer Panzerspähwagen (2cm) Sd.Kfz.234/1 from Pz.Aufkl.Abt.4 of the 4.Panzer-Division in Danzig, showing the hard edge camouflage scheme of Rotbraun RAL 8017 and Olivgrün RAL 6003 patches on the Dunkelgelb RAL 7028 base. A standard black Balkenkreuz with a white outline can just be seen on the side of the Hänglafette turret. Almost 230 vehicles were produced to the end of the war.



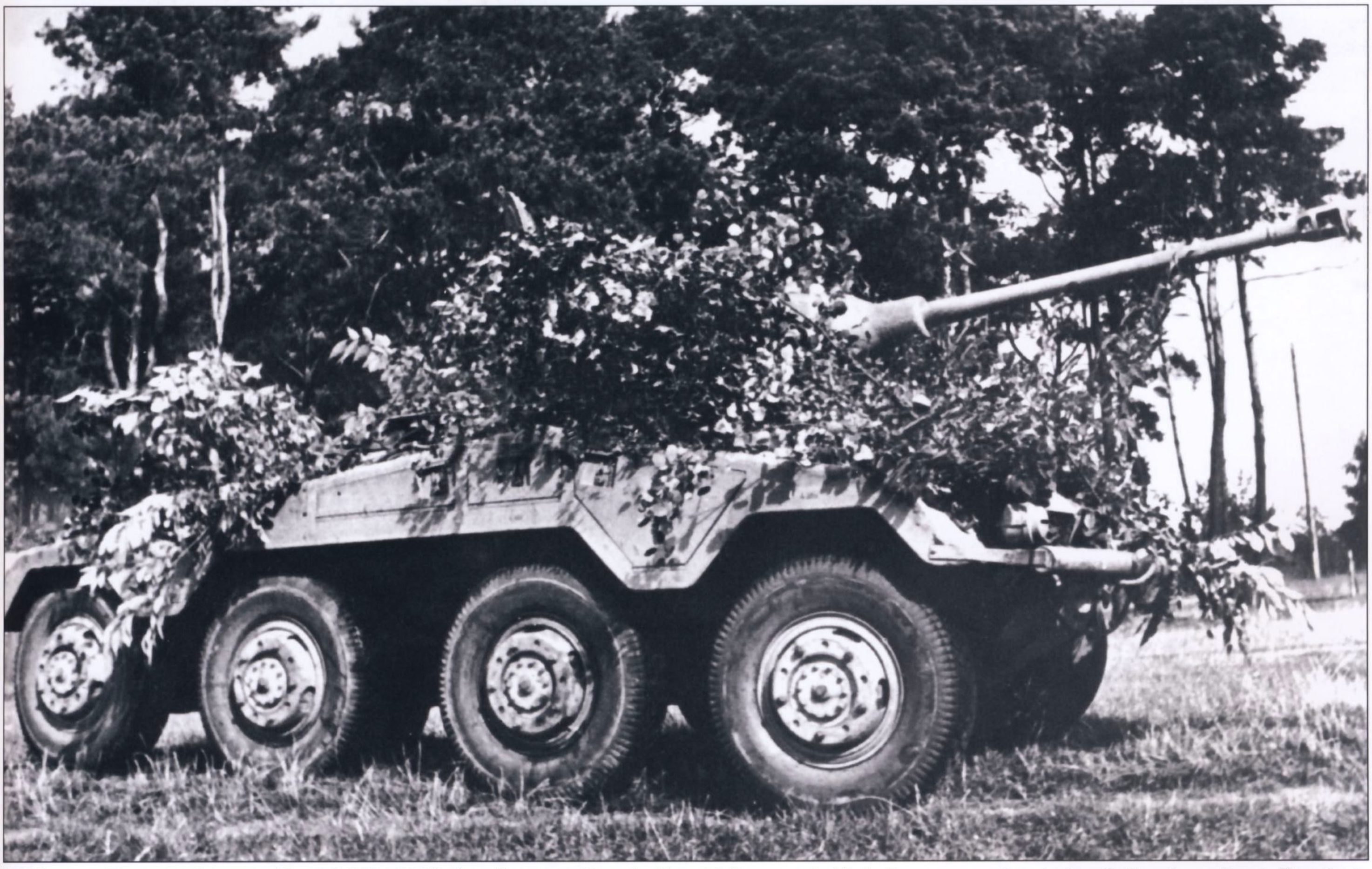
The design of the Schwerer Panzerspähwagen (5cm) Sd.Kfz.234/2 began at the same time as the Sd.Kfz.234/1. Initially, it was to be armed with a 2cm KwK.38 which was changed to a 5cm KwK.39/1 in July 1942. This vehicle was issued to Pz.Aufkl.Abt.2 of the 2.Panzer-Division and is seen here in Normandy in the early summer of 1944. A white outline tactical number '152' is painted on the turret. Not visible in this photo but seen on another photo of this particular vehicle is a black '5' painted on the forward stowage bin door. The white trident emblem of the division can be faintly seen on the left side of the front plate above the tactical emblem of an armored reconnaissance company. It was later destroyed in the Falaise Pocket during the German retreat. Note the different tread patterns on the tires.



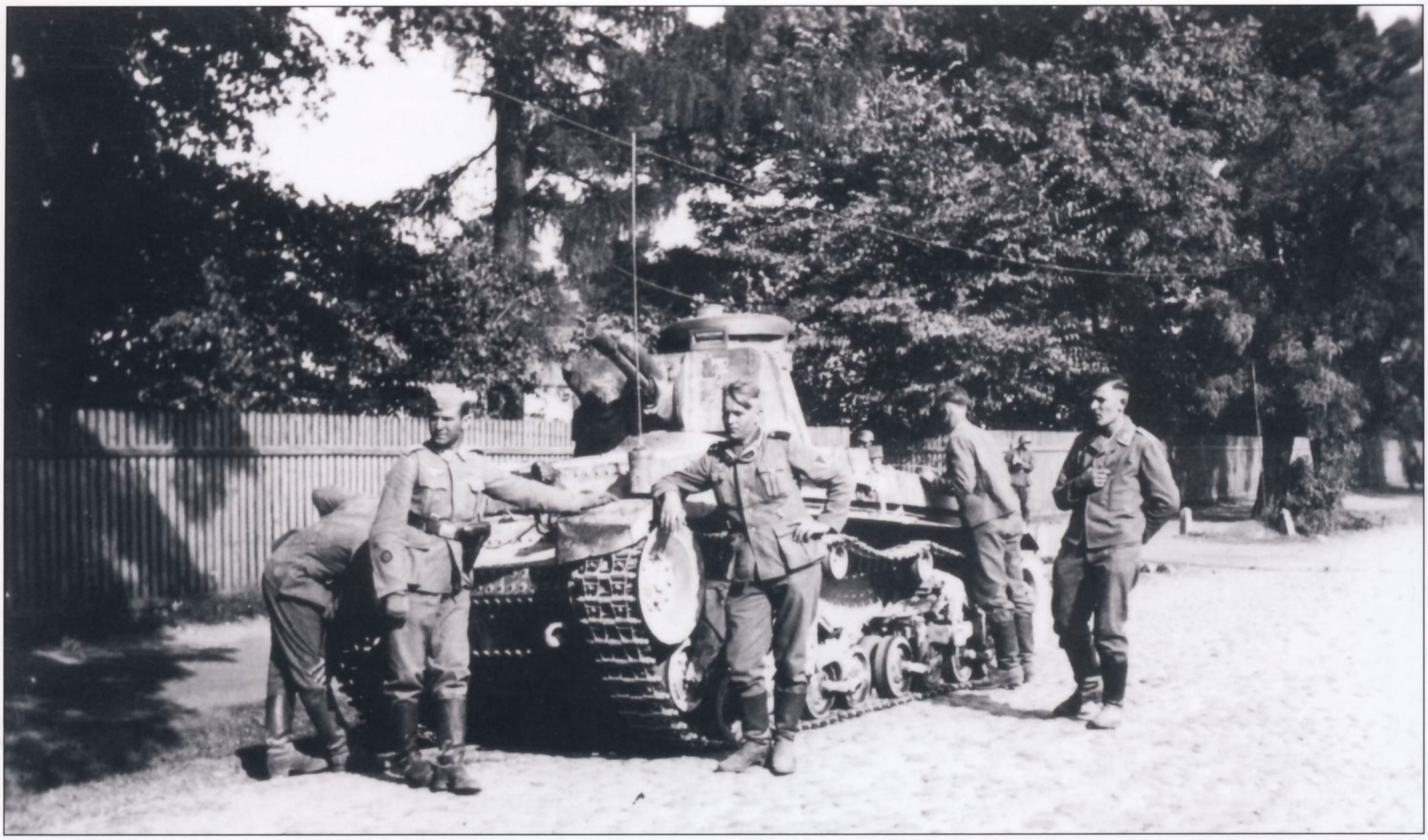
A Schwerer Panzerspähwagen (7.5cm) Sd.Kfz.234/3 and a Schwerer Panzerspähwagen (5cm) Sd.Kfz.234/2 being exhibited on a training ground at Aryss in the early summer of 1944. Production of the Sd.Kfz.234/2 began in December 1943 and ceased in June 1944 after about 100 vehicles were completed. Delivery of the Sd.Kfz.234/3 began in June 1944 with about 90 completed to December 1944 at which time production was changed over to the Sd.Kfz.234/4 mounting the 7.5cm PaK 40.



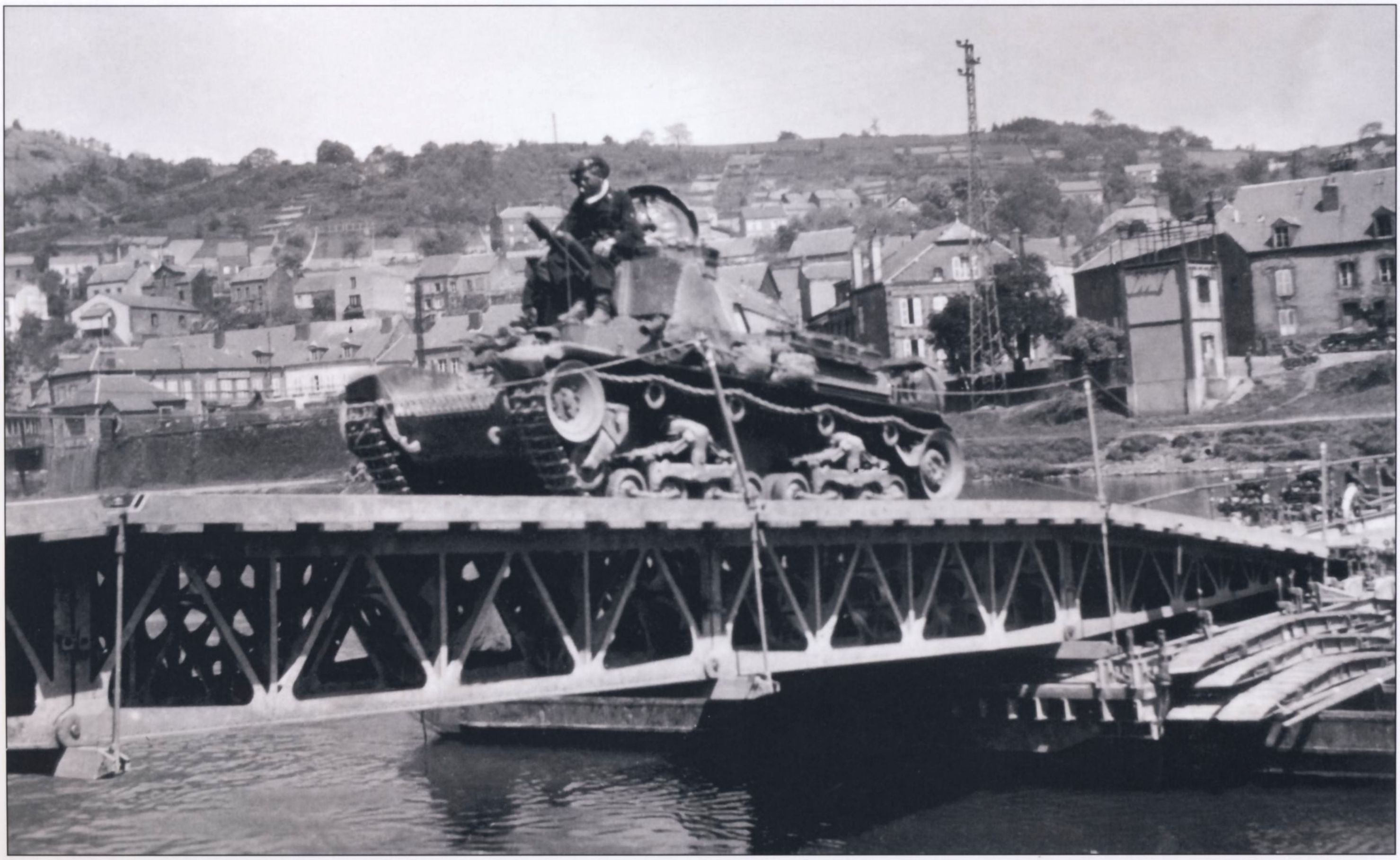
This Schwerer Panzerspähwagen (5cm) Sd.Kfz.234/2 is equipped with a 2 meter star antenna for the Fu.12 long range radio set and a standard 2 meter rod antenna mounted on the turret roof for the Fu.Spr.Ger. 'f' radio set. The tactical number, '023' or '025', is painted in black with a white outline on the side of the turret.



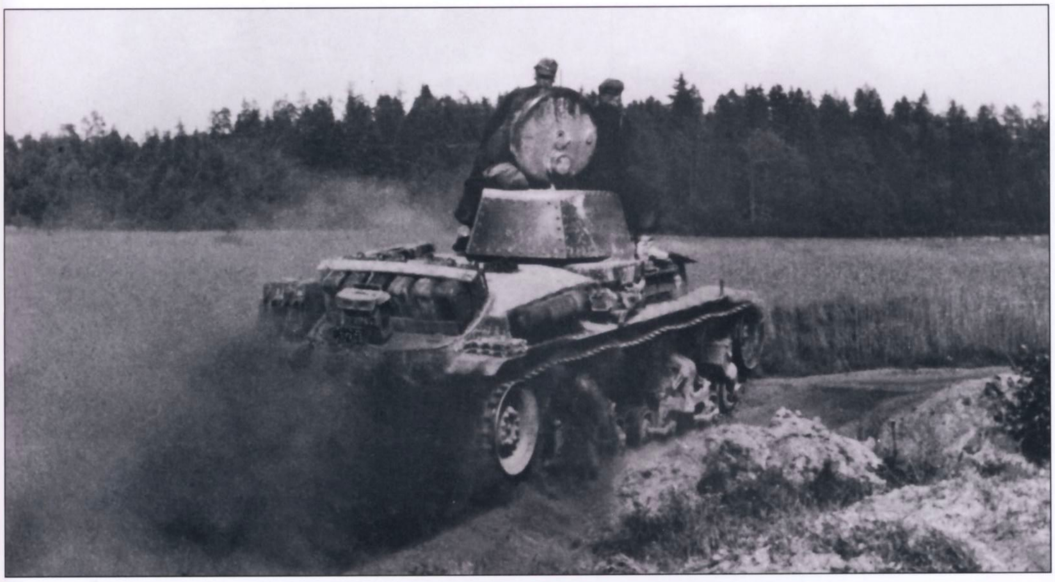
A Schwerer Panzerspähwagen (5cm) Sd.Kfz.234/2, heavily camouflaged with cut foliage, probably in France sometime before D-Day. According to Tom Jentz in Panzer Tracts No.13, the term 'Puma' was never an official designation used for this vehicle.



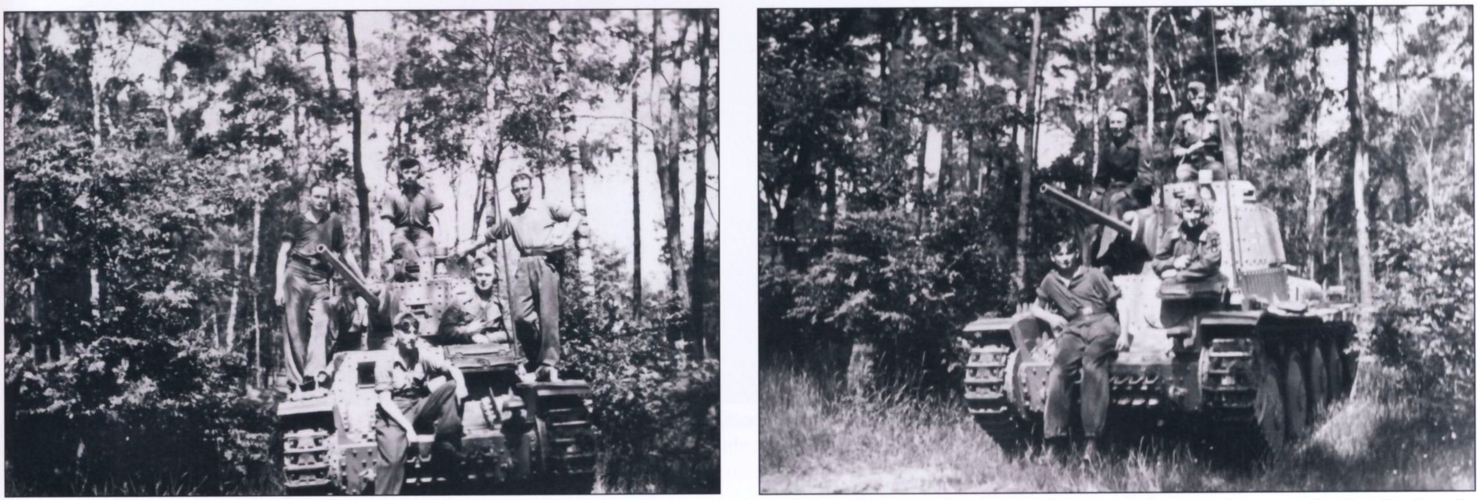
A group of Wehrmacht and Luftwaffe soldiers gather around a Pz.Kpfw.35(t) parked on a street, probably in France in 1940. Originally produced in Czechoslovakia as the LT vz.35, approximately 80% were manufactured by Skoda and 20% by CKD. Armament consisted of a 37mm vz.34 cannon and a ZB vz.35 machine gun which was adequate for dealing with enemy armor at the time. A dust cover has been fixed to the end of the gun and canvas dust covers protect the hull and turret machine guns.



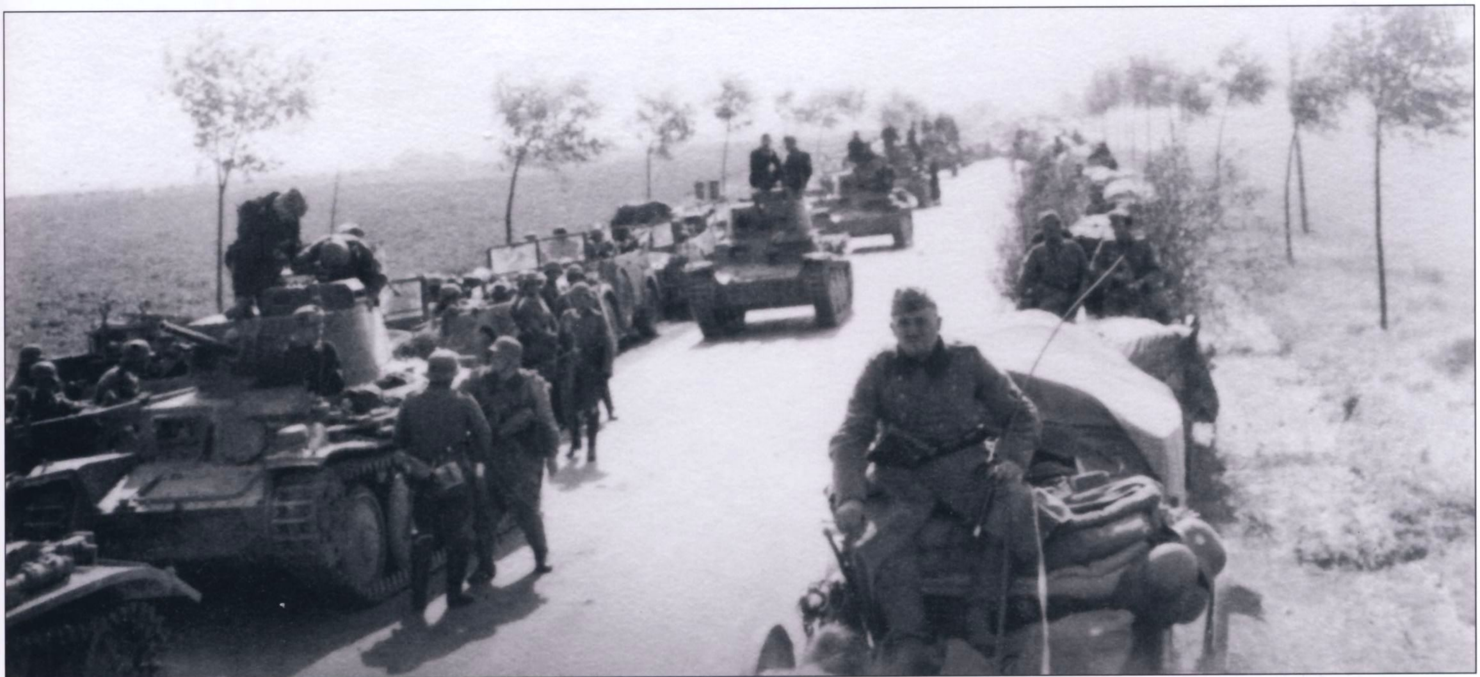
Another Pz.Kpfw.35(t) crosses a temporary bridge across a river in France in 1940. At the beginning of the Battle of France, 6.Panzer-Division was equipped with 118 Pz.Kpfw.38(t) plus an additional 14 Pz.Bef.Wg.38(t). They were the only Panzer-Division to be equipped with this vehicle both in France in 1940 and Russia in 1941.



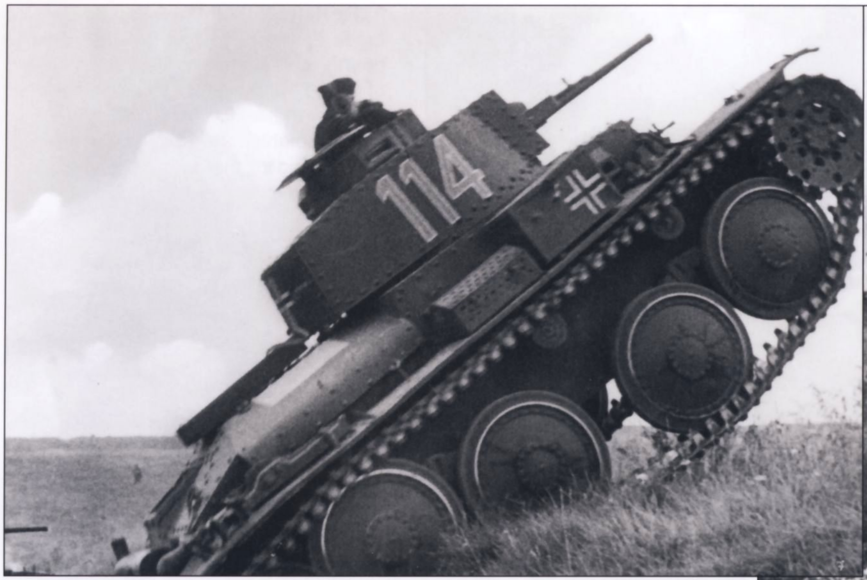
A Pz.Kpfw.35(t) from 6.Panzer-Division races down a dusty dirt road in Russia during the summer of 1941. The number of battle ready tanks increased to 155 while the number of available Panzerbefehlswagen was reduced to 5. By the end of the year, most had been lost in battle.



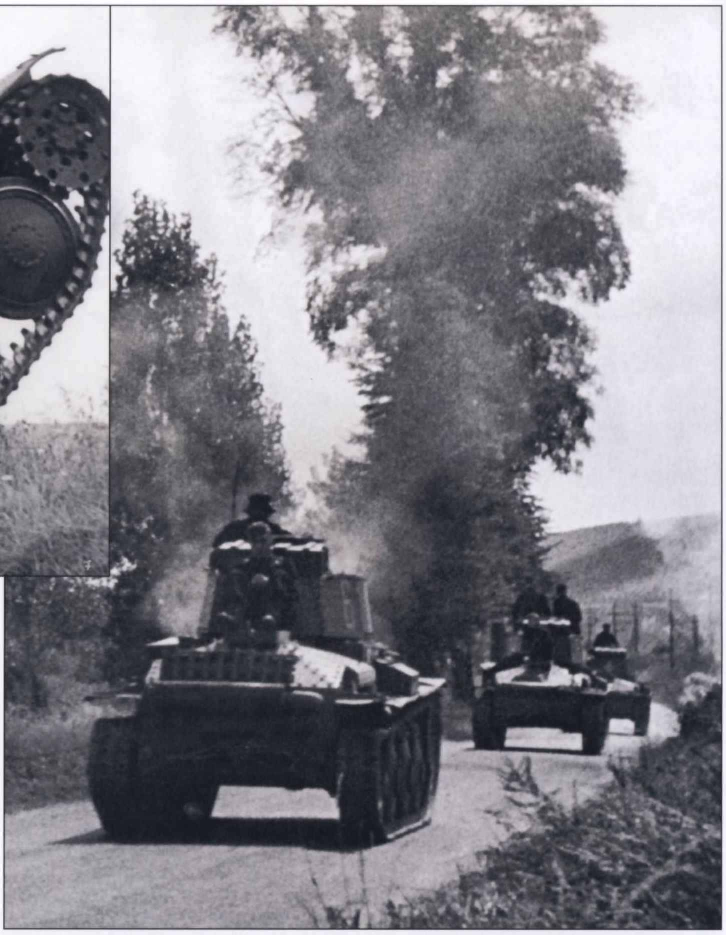
This Pz.Kpfw.38(t) Ausf.C als Zugfr.Wg. (platoon leaders vehicle) has had the hole for the bow machine gun plated over to provide space for the Fu.5 radio set. The standard Czech antenna base has been replaced with a standard German Antennenfuss flexible rubber mount. It can be identified as an Ausf.C by the two large rivets on the angle reinforcing where the lower hull front plate is connected to the circular side plate extension protecting the drive sprocket and the two closely spaced rivets to the right of the plated hull MG opening. Also note that the Notek light has been relocated to the glacis plate from the fender.



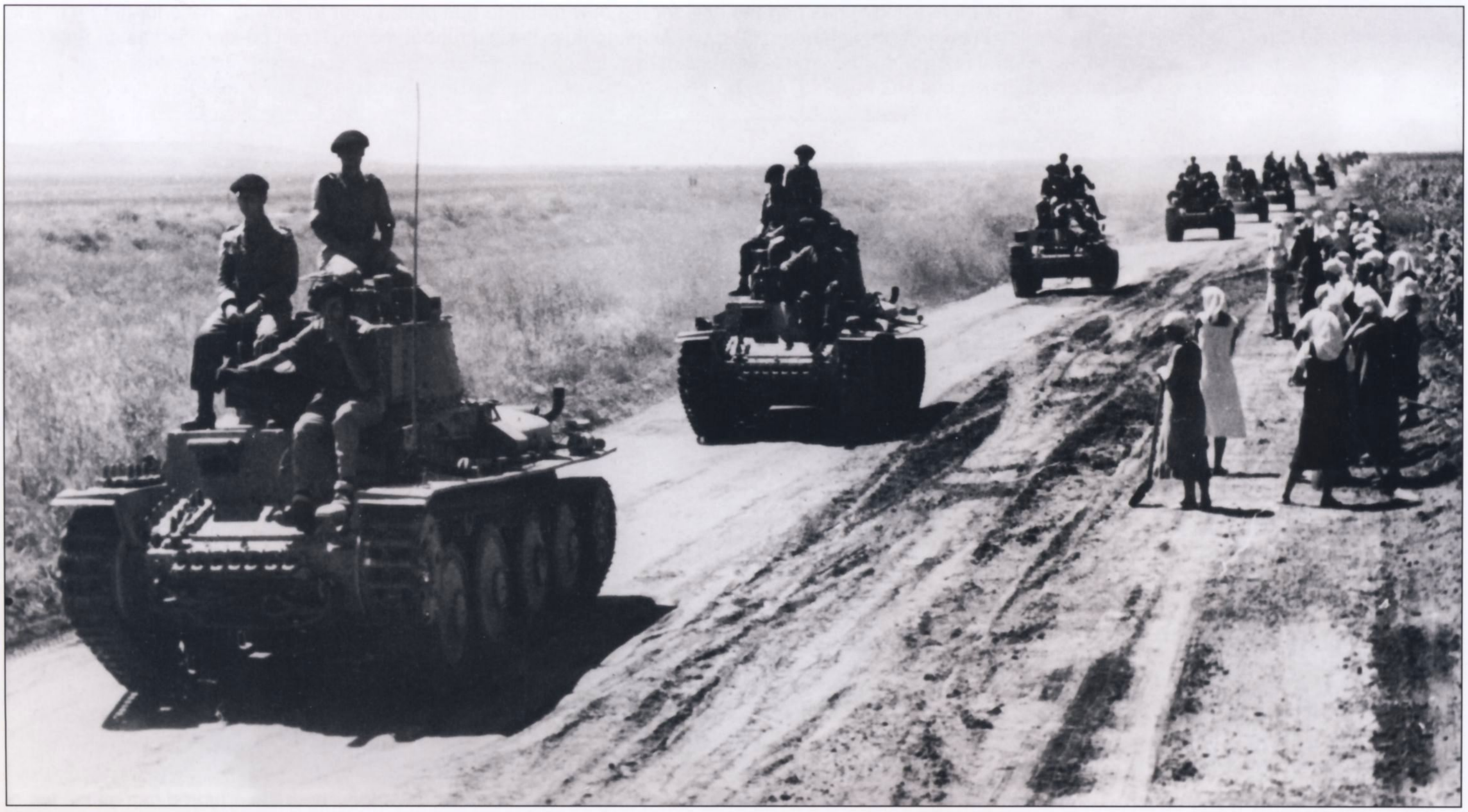
A column of Pz.Kpfw.38(t) led by an Ausf.A als Zugfr.Wg. with the Czech antenna on its original cylindrical mount and without the armored cap on the top of the periscope. Judging by the head gear, the photo was probably taken in France in 1940 and they are likely from Pz.Rgt.10 of the 8.Panzer-Division as Pz.Rgt.25 of the 7.Panzer-Division used large tactical number on their turrets.



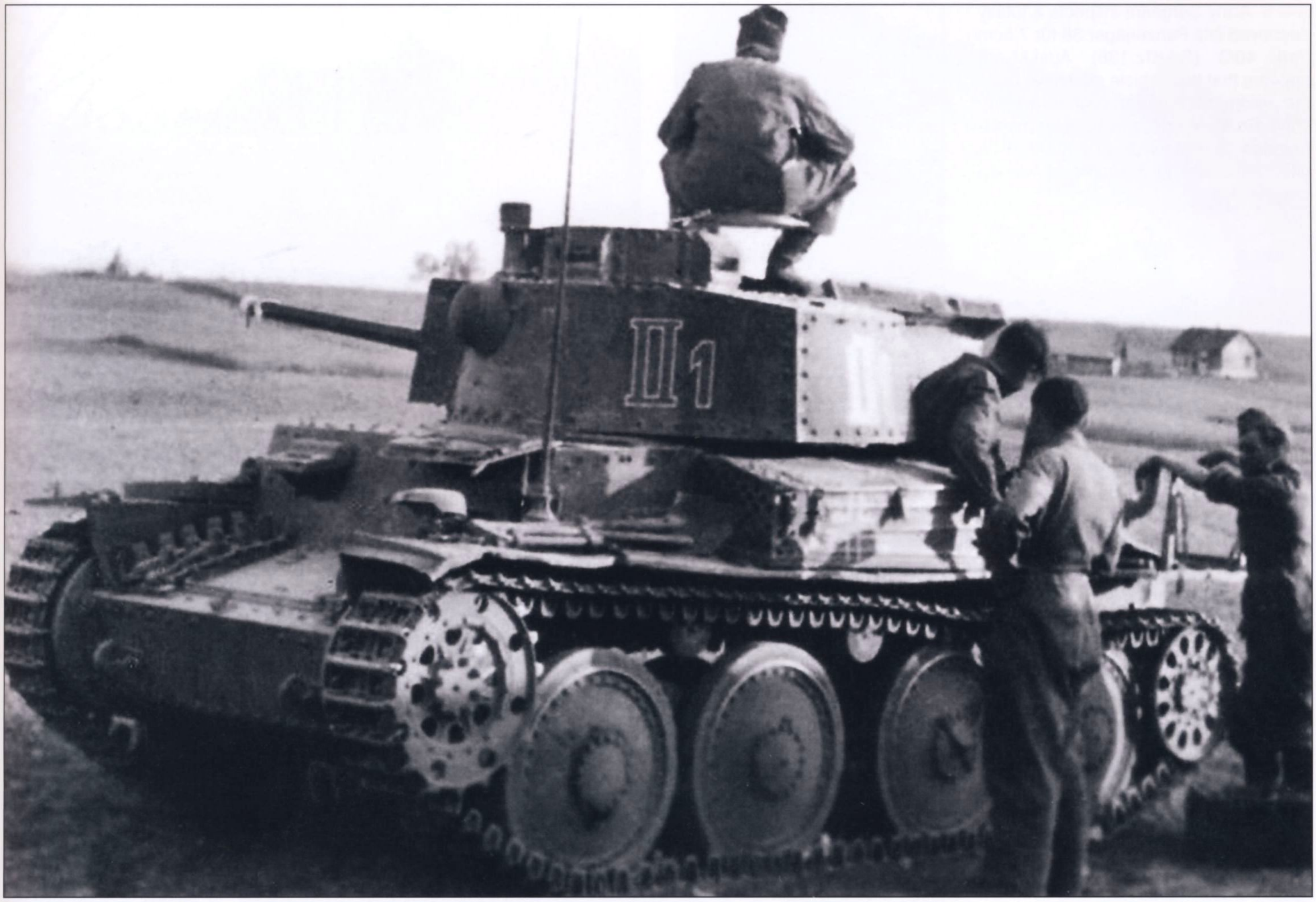
A Pz.Kpfw.38(t) Ausf.B-D displaying the large red with white outline tactical numbers used by Pz.Rgt.25 of the 7.Panzer-Division in France and Russia. Also visible under the spare road wheel carried on the engine deck, is the large white painted rectangle for aerial identification first used during the Battle of France. A narrow style black Balkenkreuz with a white outline is painted on the storage box on the right fender. Note how the teeth of the drive sprocket and rims on the road wheels have been polished from continual wear by the track links.



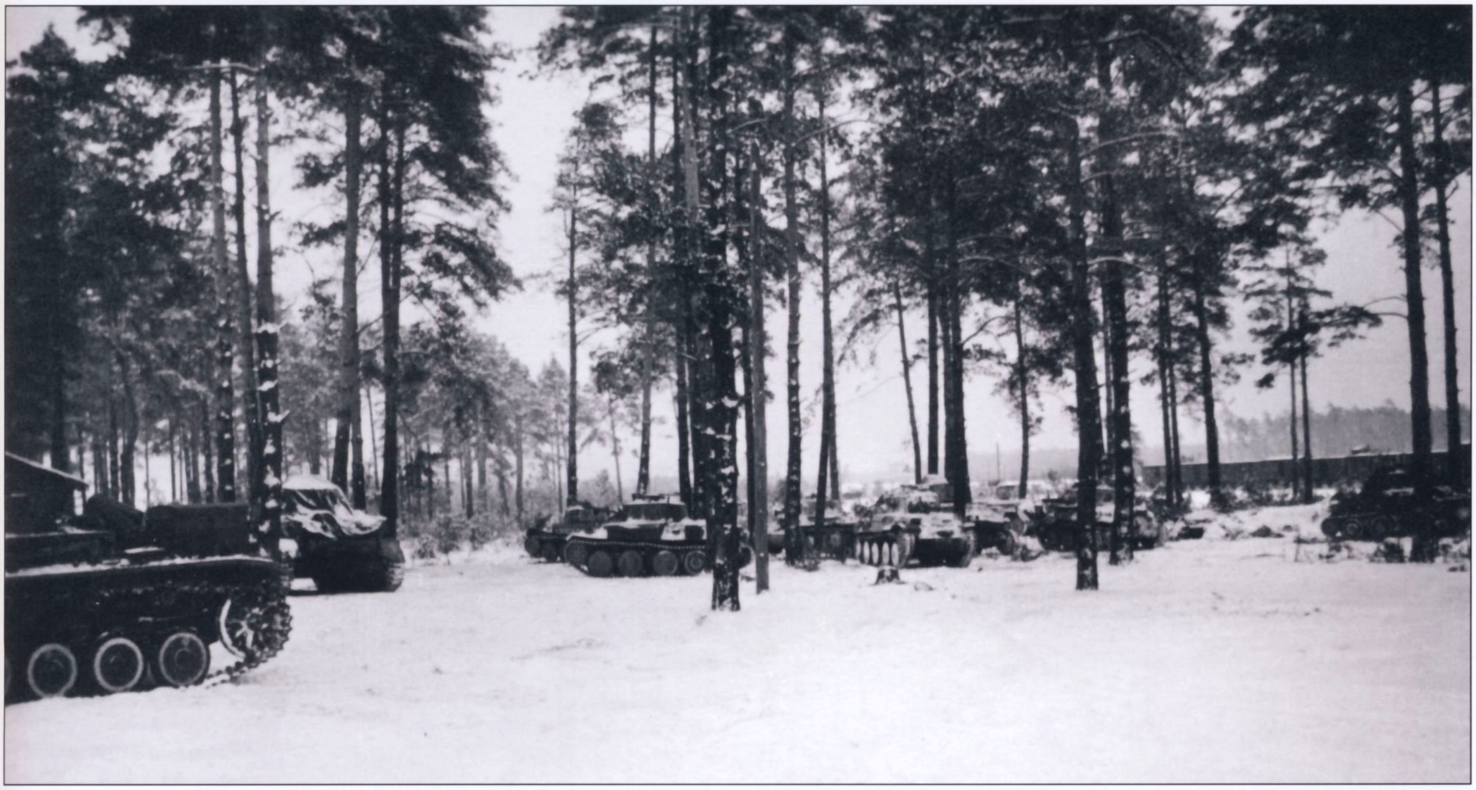
A column of Pz.Kpfw.38(t) from Pz.Rgt.25 of the 7.Panzer-Division in Russia in 1941. The first two digits of the tactical number can be seen on the side of the turret, '61', painted in red with a white outline. For Operation 'Barbarossa', Pz.Rgt.25 had three Abteilung, each with four Kompanies and as such, would have been the only unit to have Pz.Kpfw.38(t) assigned to their 6.Kompanie.



A column of Pz.Kpfw.38(t) from the Romanian First Royal Armored Division, led by an Ausf.F-G als Zugfr.Wg. travel down a dusty Russian road in the summer of 1943. After being virtually wiped out at Stalingrad, they were re-equipped with 50 obsolete Pz.Kpfw.38(t)s in March 1943.

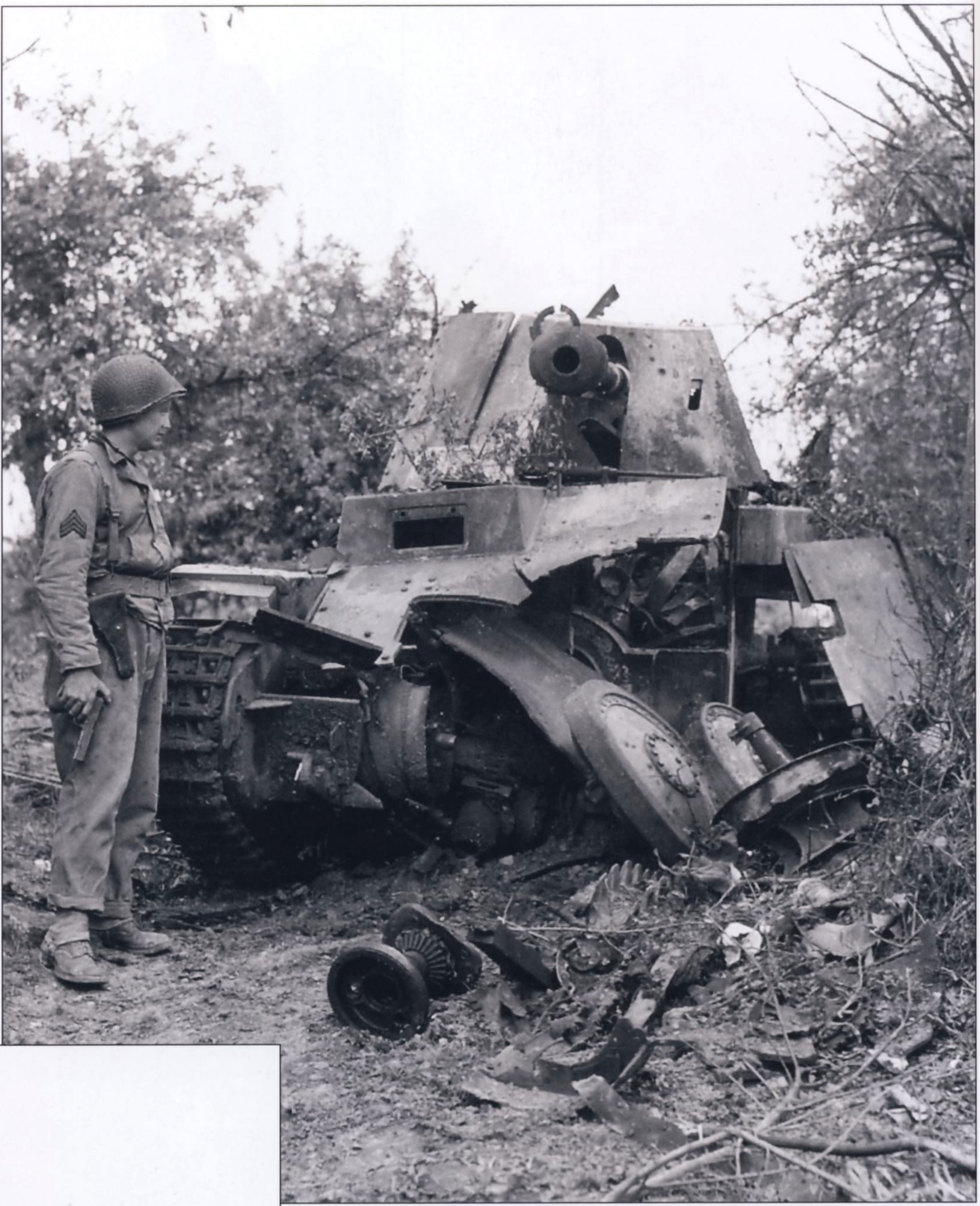


A Pz.Kpfw.38(t) Ausf.F als Pz.Bef.Wg. from Pz.Rgt.25 of the 7.Panzer-Division in Russia in 1941. Although obscured by the shadow of the open radio operator's hatch, the lack of a hull MG likely indicates that the hole for it is plated over. The markings on the turret sides are red with a white outline and are repeated on the rear of the turret in white only. They indicate that this is the vehicle of the II.Abteilung commander.

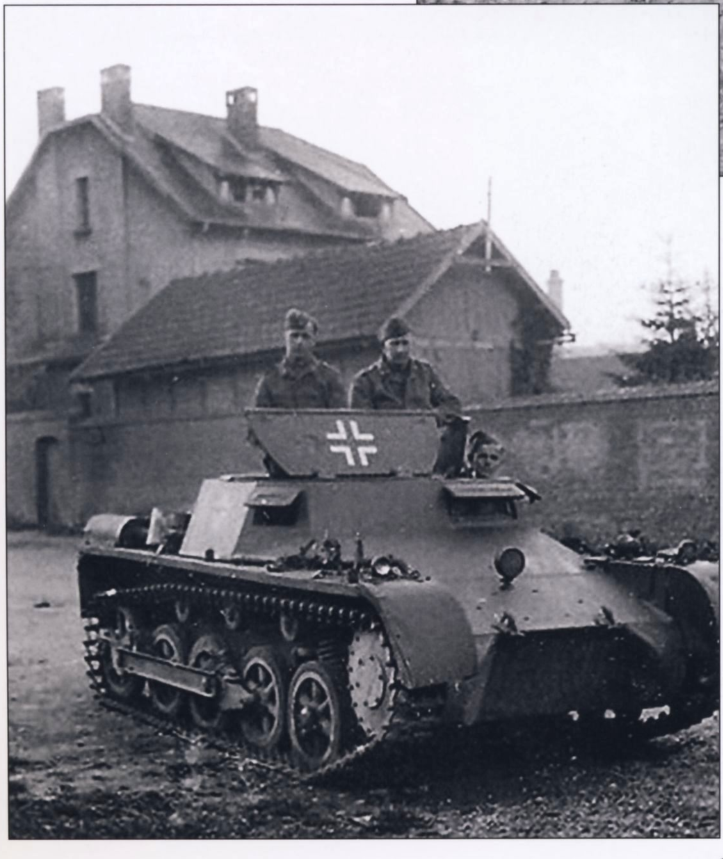


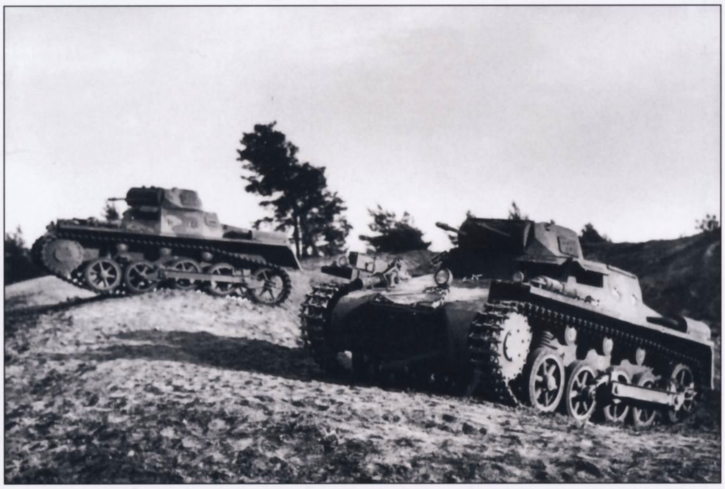
Several snow covered Pz.Kpfw.38(t), a Pz.Kpfw.II and a Pz.Kpfw.IV Ausf.D are parked in a pine forest at a railhead in Russia during the winter of 1941-42. Near the center of the photo with its side facing the camera, is a Pz.Kpfw.38(t) als Pz.Bef.Wg. (Sd.Kfz.267) fitted with a large frame antenna and carrying the unique marking 'D01' painted on the turret, likely in red with a white outline.

A U.S. Army Sergeant inspects a totally destroyed late Panzerjäger 38 für 7.5cm PaK 40/3 (Sd.Kfz.138) Ausf.M. It appears that this vehicle may have been the victim of a large caliber artillery shell. Earlier production vehicles had a rounded cast steel driver's hood while later vehicles had a simplified welded one like this.

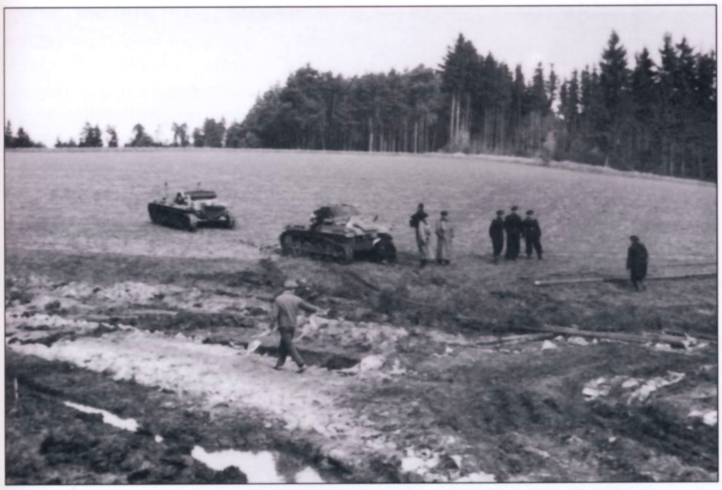


The Munitionsschlepper auf Pz.Kpfw.I Ausf.A (Sd.Kfz.111) was built on the chassis of the Pz.Kpfw.I Ausf.A that had the turret removed and opening covered with a large hatch for protection. Other than a white outline Balkenkreuz on the roof hatch and hull sides, no other markings are visible. This one is seen either in Germany or France in 1940 after the order to paint equipment in Dunkelgrau Nr.46 was issued. There were a total of 51 converted in September 1939.

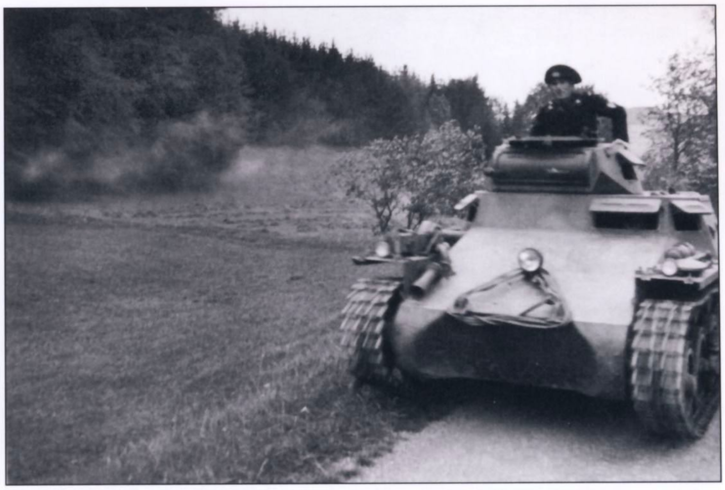




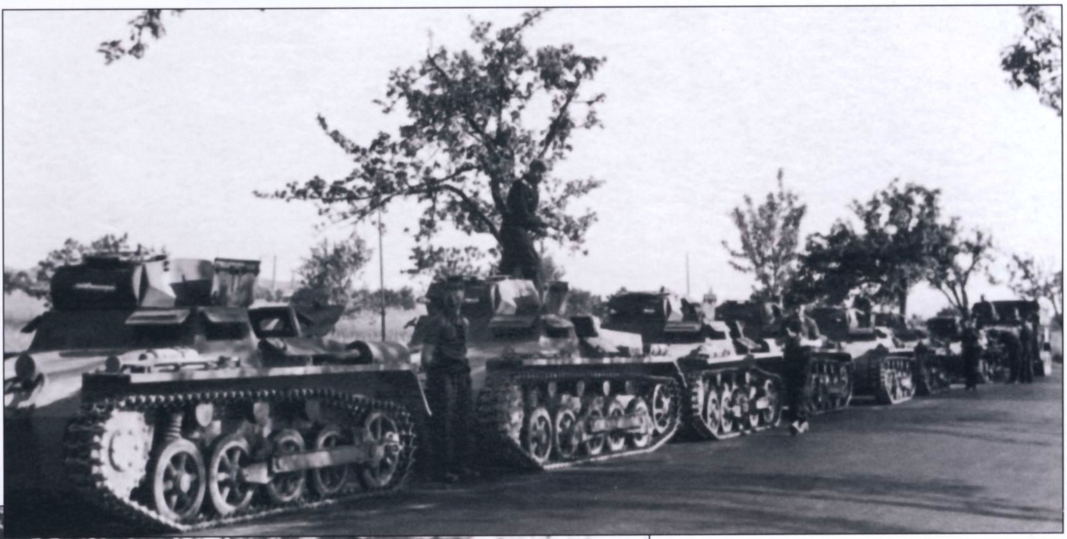
Two Pz.Kpfw.I Ausf.A seen on a training ground in Germany in 1935. They are finished in the three tone pre-war paint scheme called the Buntfarbenanstrich consisting of Nr.17 erdgelb-matt, Nr.18 braun-matt and Nr.28 gruen-matt applied in irregular patches. Neither one has the armored reinforcing strips on the sides of the superstructure that were added beginning in October 1935.



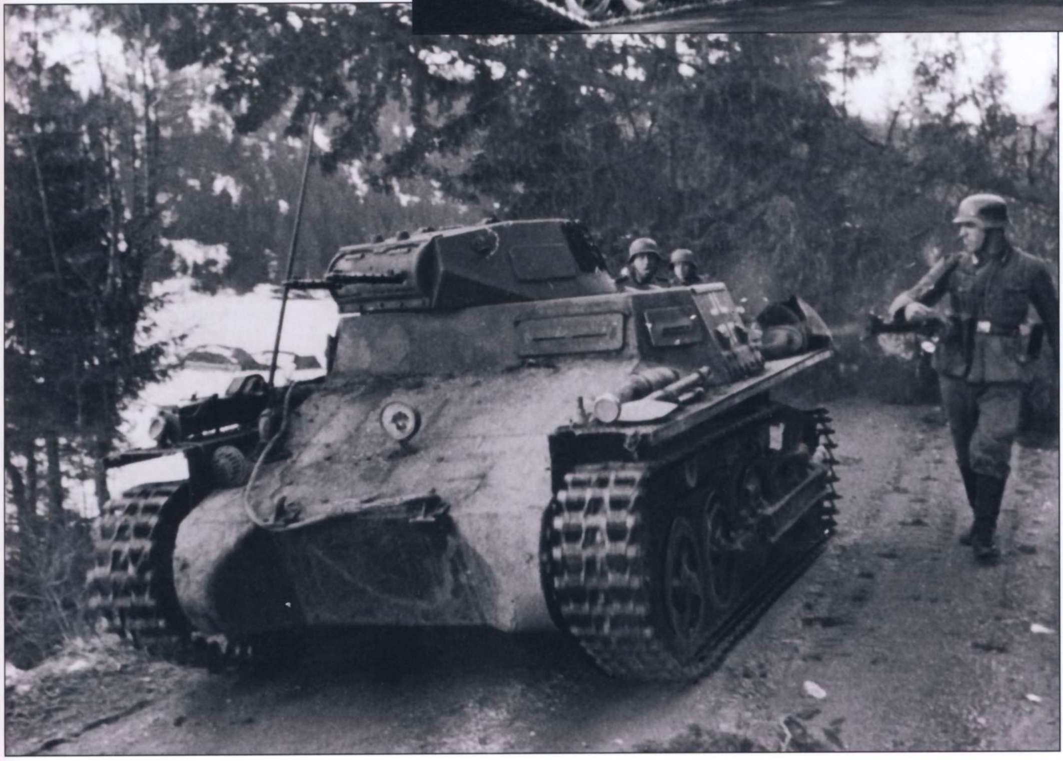
A Panzer-Schulfahrgestelle Ausf.B on the left and a Pz.Kpfw.I Ausf.A on the right on a training ground somewhere in Germany before the war. The Schulfahrzeug was created by leaving off the turret and superstructure of a standard Pz.Kpfw.I Ausf.B and adding a handrail for the crew to hold on to and replacing the engine deck armor plates with a lighter sheet metal covering. A total of 295 vehicles were converted. The Pz.Kpfw.I Ausf.A has been modified by adding an armored plate on the engine deck and two armored cowls over the two rear exhaust grilles.



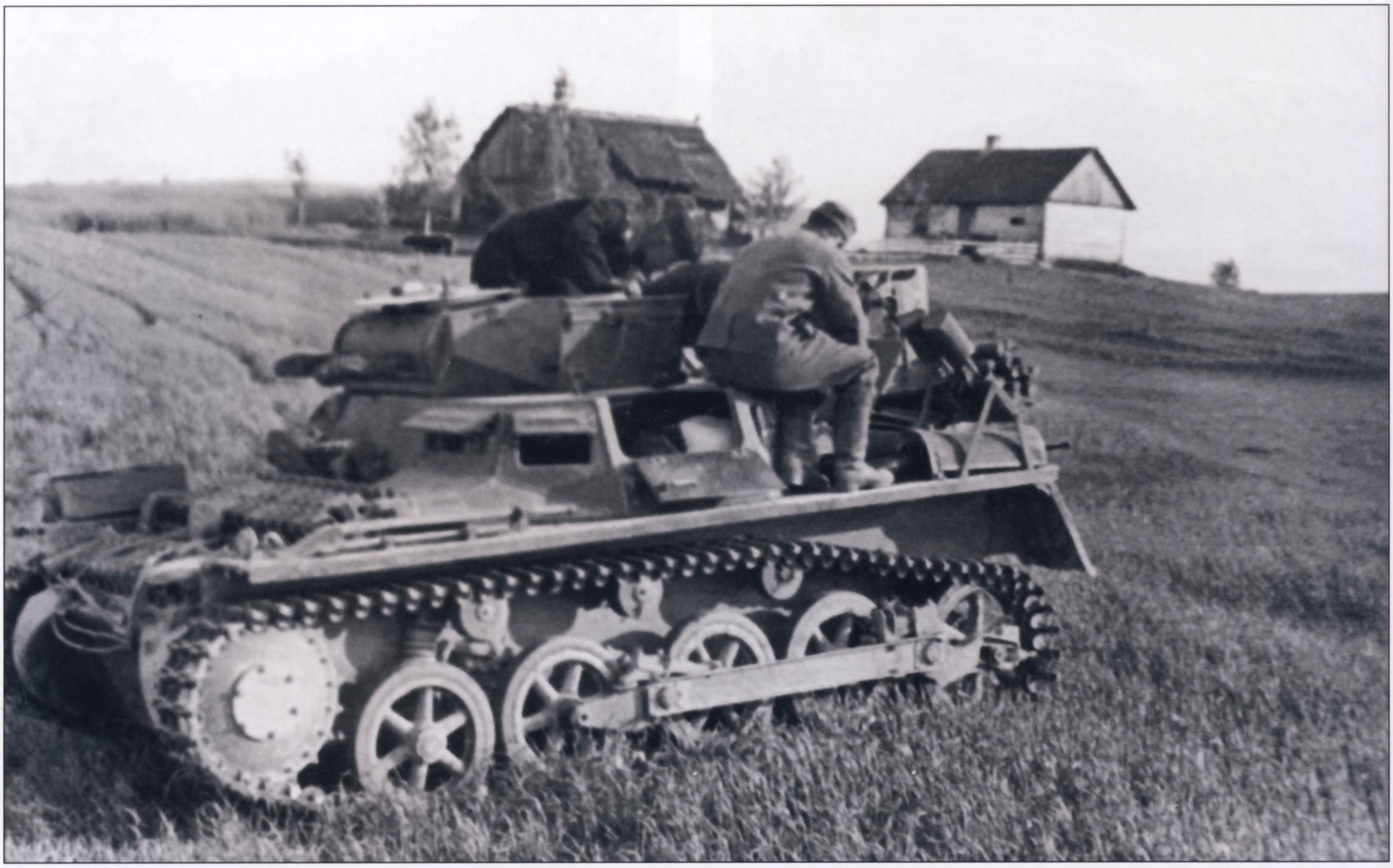
A Pz.Kpfw.I Ausf.A speeds down a country road on a pre-war training maneuver. Equipped with a 3.5 liter 4 cylinder Krupp M 305 motor, it could attain a maximum speed of 37.5 km/hr on good roads and 10-12 km/hr cross country. This 2.Serie/La.S. has the narrow access hatch on the glacis plate and does not have the armored reinforcing strips on the sides of the superstructure.



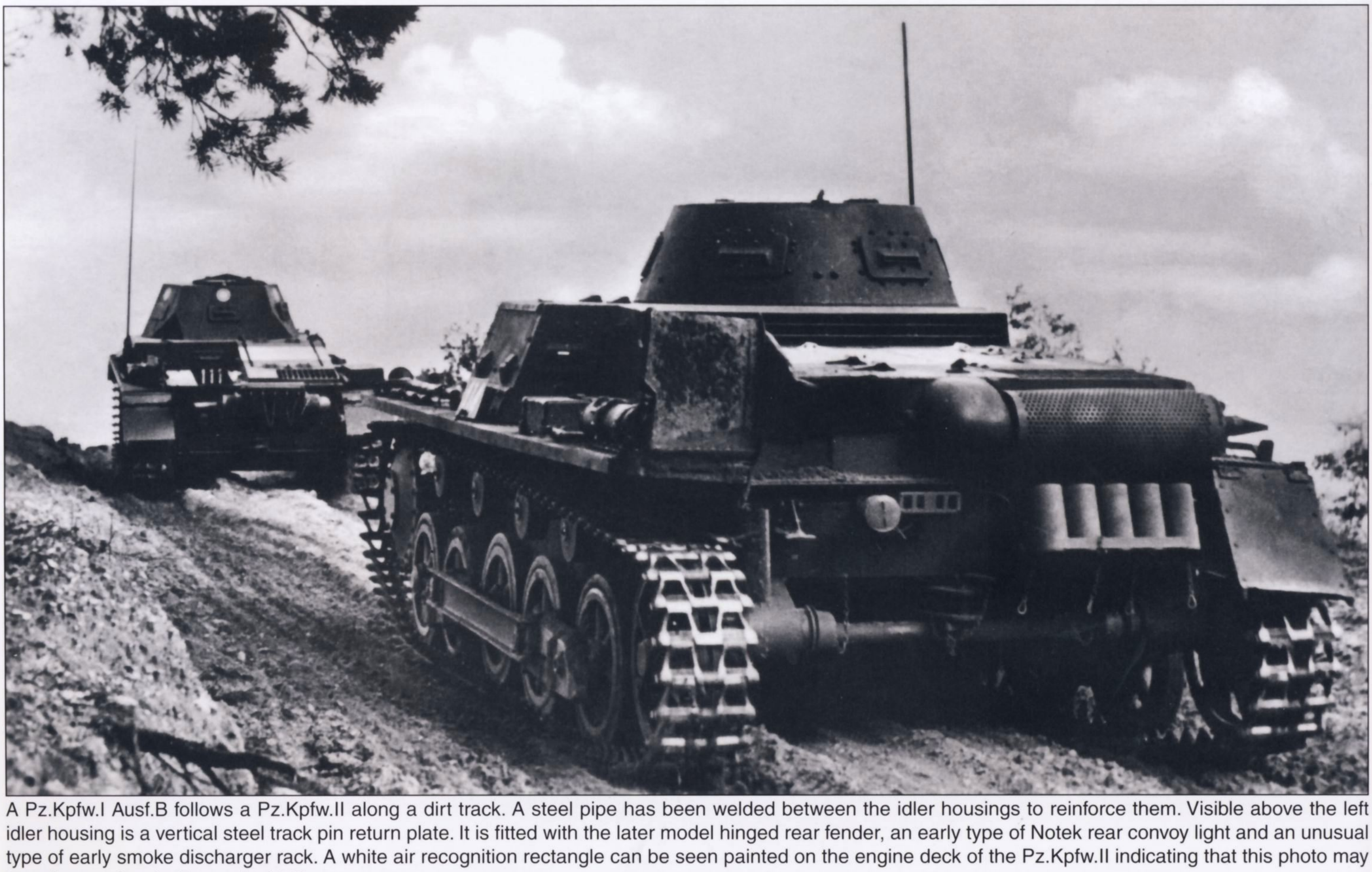
A column of Pz.Kpfw.I Ausf.A and a single Pz.Kpfw.I Ausf.B park alongside a road in a pre-war exercise. The longer chassis and extra road wheel on the Ausf.B are apparent in this photograph. The Ausf.A has the armored reinforcing strip on the side of the superstructure just visible here below the open side hatch. The mottled appearance is caused by the sun shining through the trees along the road and is not a camouflage paint scheme.



The first units from Panzer-Abteilung z.b.V.40 arrived Norway April 1940, equipped with Pz.Kpfw.I's and Pz.Kpfw.II's along with three Neubau-Pz.Kpfw.IV from Panzerzug Horstmann. Here we see a Pz.Kpfw.I Ausf.A from 3.Kompanie during operations in the snow covered countryside.

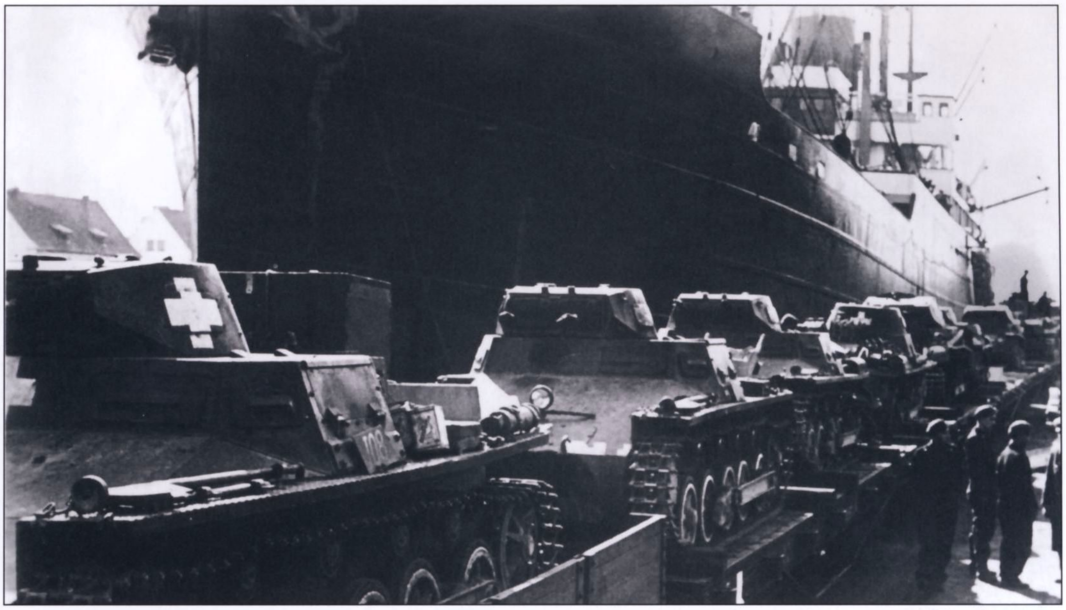


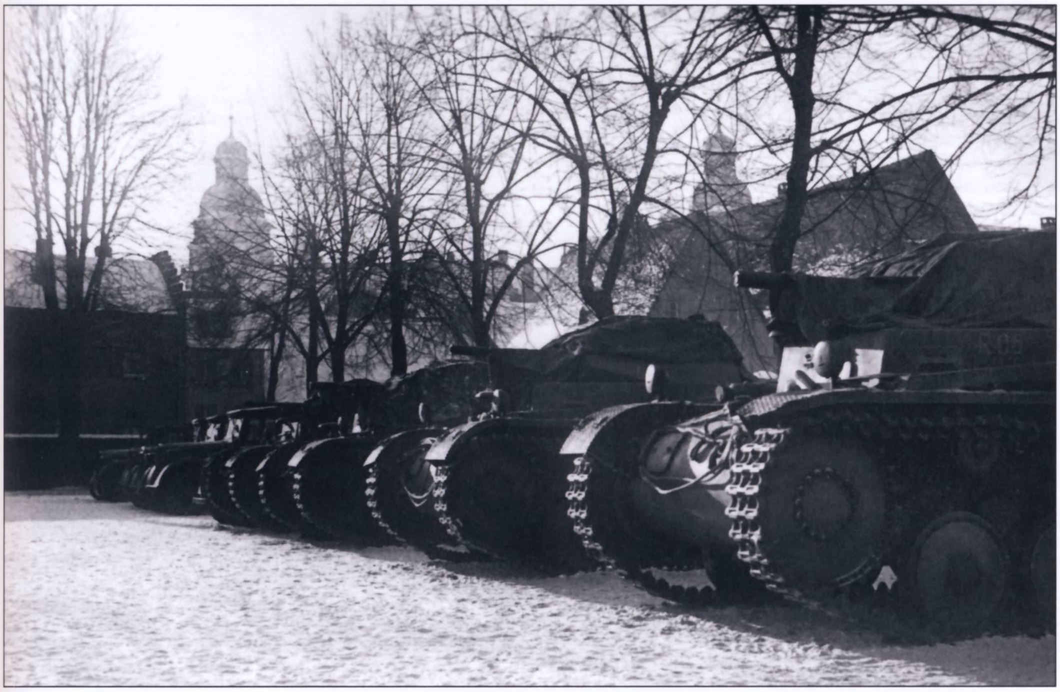
This Pz.Kpfw.I Ausf.A is notable for the smoke grenade launchers mounted on the rear of the fenders. This example has the armored reinforcing strip on the side of the superstructure but does not appear to have the reinforced road wheels on the last three stations. It appears that a metal stowage box has been attached to the right fender and the jack relocated to the glacis plate.



A Pz.Kpfw.I Ausf.B follows a Pz.Kpfw.II along a dirt track. A steel pipe has been welded between the idler housings to reinforce them. Visible above the left idler housing is a vertical steel track pin return plate. It is fitted with the later model hinged rear fender, an early type of Notek rear convoy light and an unusual type of early smoke discharger rack. A white air recognition rectangle can be seen painted on the engine deck of the Pz.Kpfw.II indicating that this photo may have been taken in France in 1940.

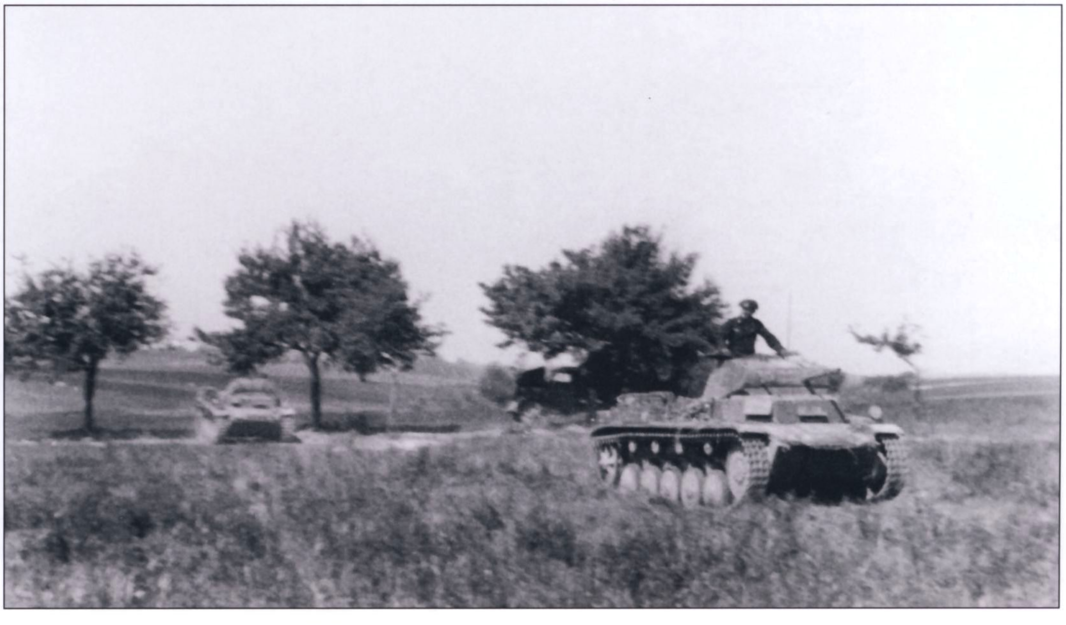
These Pz.Kpfw.I Ausf.B wait to be loaded on a ship for transport after the Polish Campaign. Small rhomboid shaped metal plates were in common usage at this time on which the tactical number of the vehicle was painted. On the nearest tank, the number 'I08' is painted, probably in yellow on a black background along with the large white Balkenkreuz also in use at the time. The wider access hatch on the glacis plate can be seen on the next vehicle.

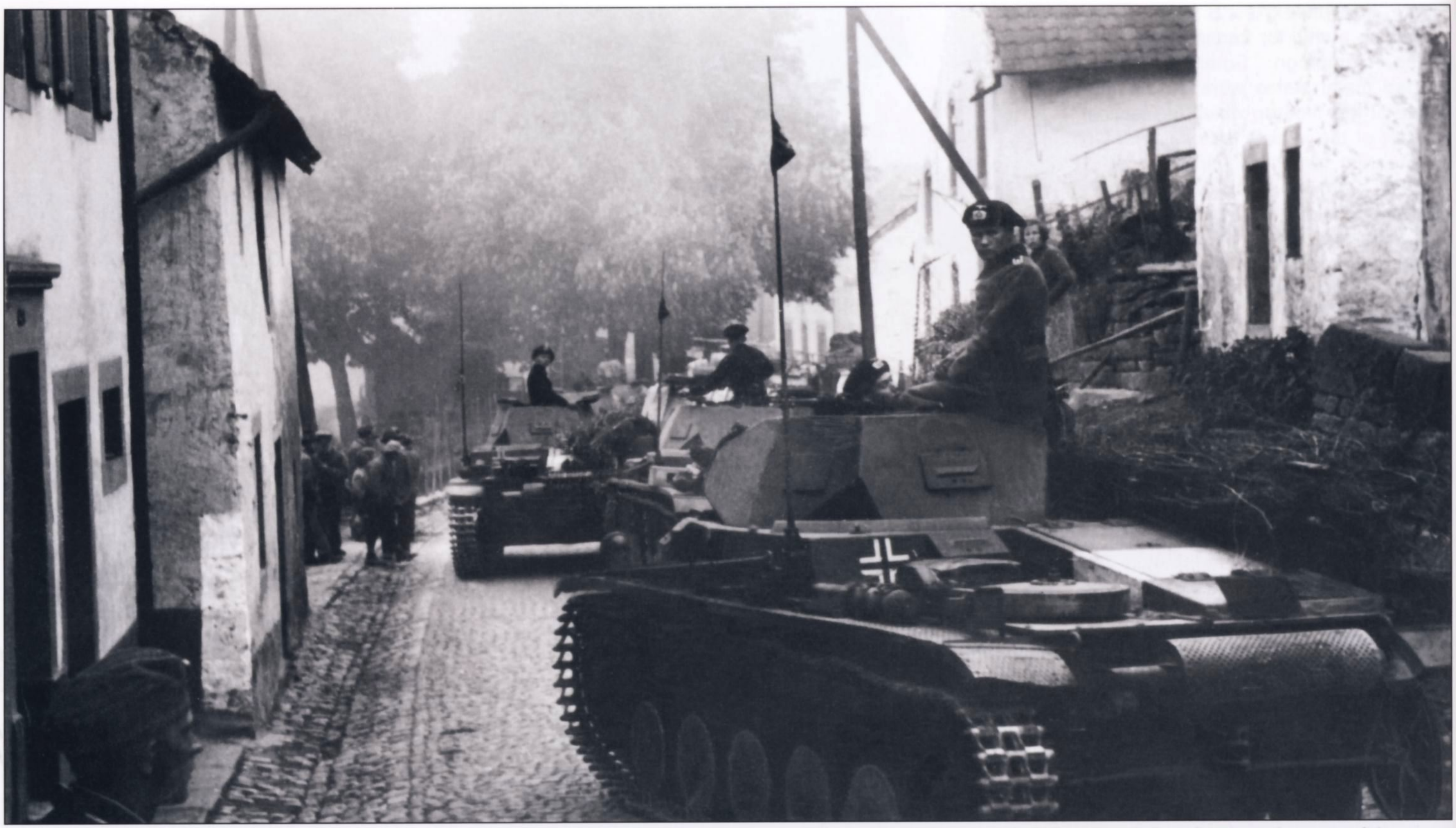




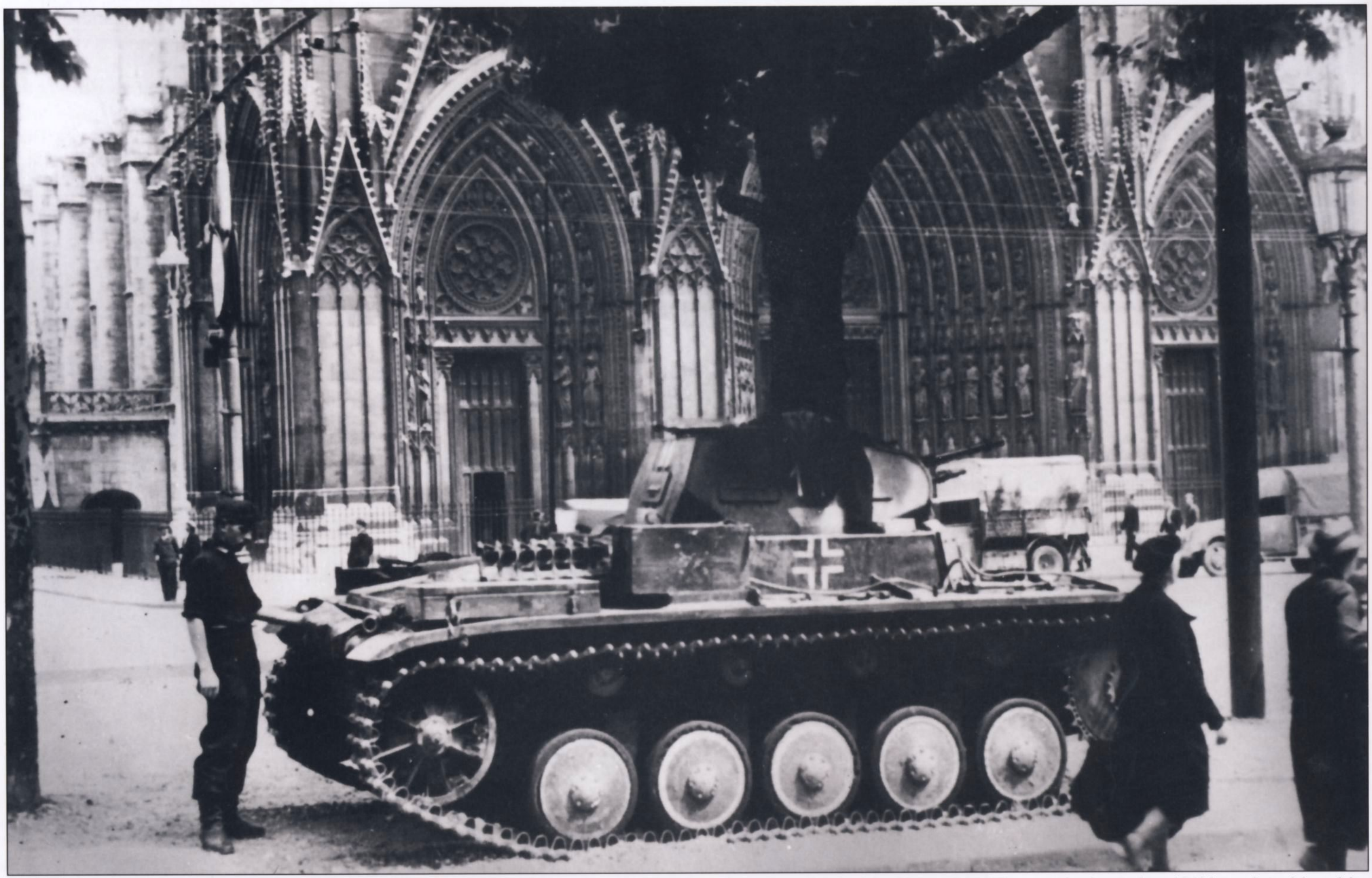
Four early Pz.Kpfw.II and some staff cars have been parked on the edge of a parade square on a winter day. All the Panzer have a tarp placed over the turret and caps placed on the muzzle of the 2cm KwK30 main armament for protection from the elements. The flat driver's visor and rounded bow plate on the nearest vehicle indicate that this is an Ausf.c as the Ausf.A, B and C had a triangular shaped visor with a vision slit. The nearest vehicle also has a tactical number 'R06' painted on the side of the hull just behind the driver's side visor while the one behind has 'R05' indicating that these are regimental staff vehicles.

The frontal armor on the Pz.Kpfw.II Ausf.c, A, B, C was only 14.5mm thick and had proved to be vulnerable to Polish anti-tank rifles. Additional 30mm plates were added to the front of the hull, superstructure and turrets of approximately 70% of these vehicles by May 1940. The additional plates on the hull consisted of a flat plate on the front that was curved at the bottom to conform to the rounded front plate of the vehicle and a flat plate on the glacis. Here, a Pz.Kpfw.II Ausf.A, B, C with the small triangular driver's visor and fitted with the additional armor plates, advances through a French field in May 1940.

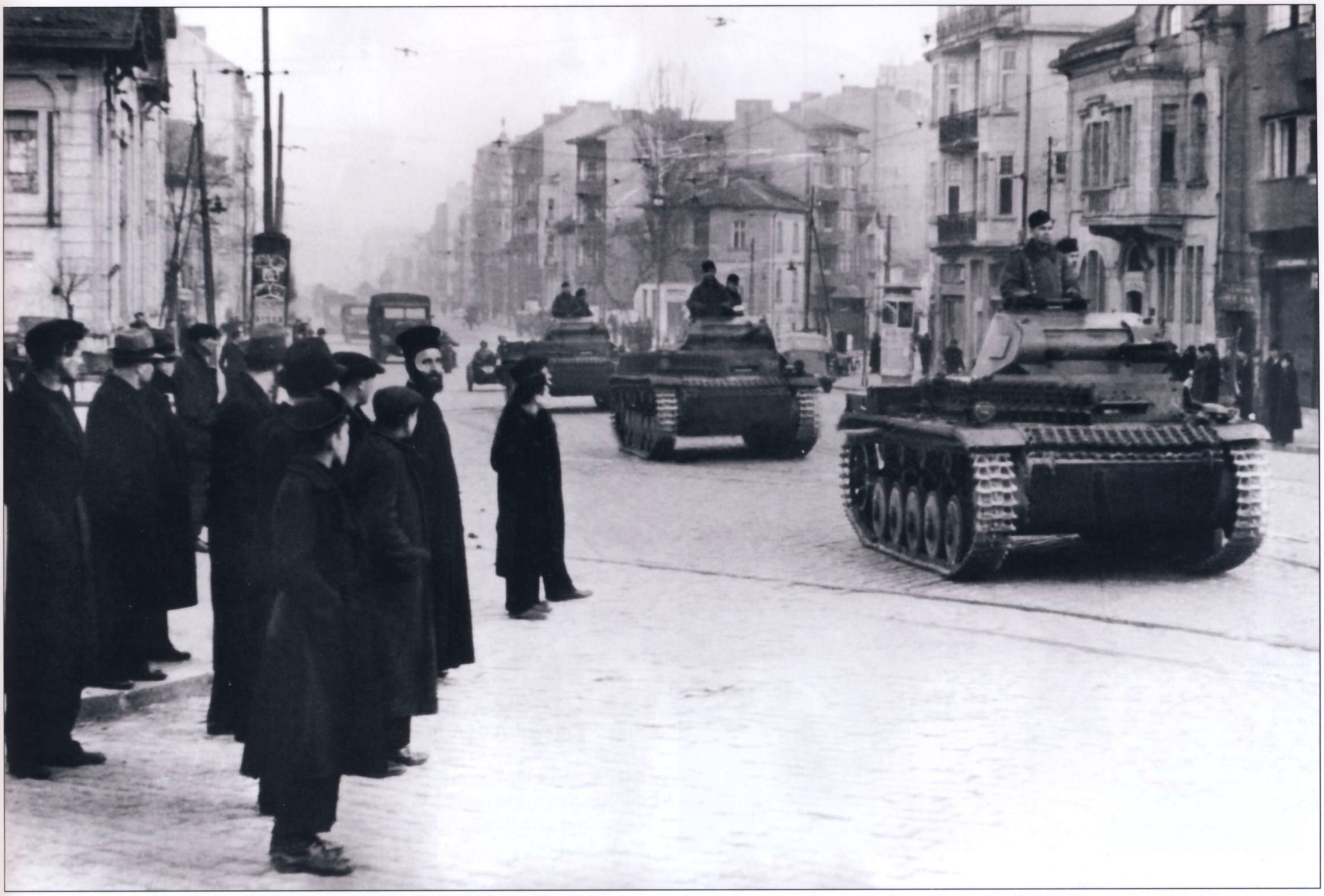




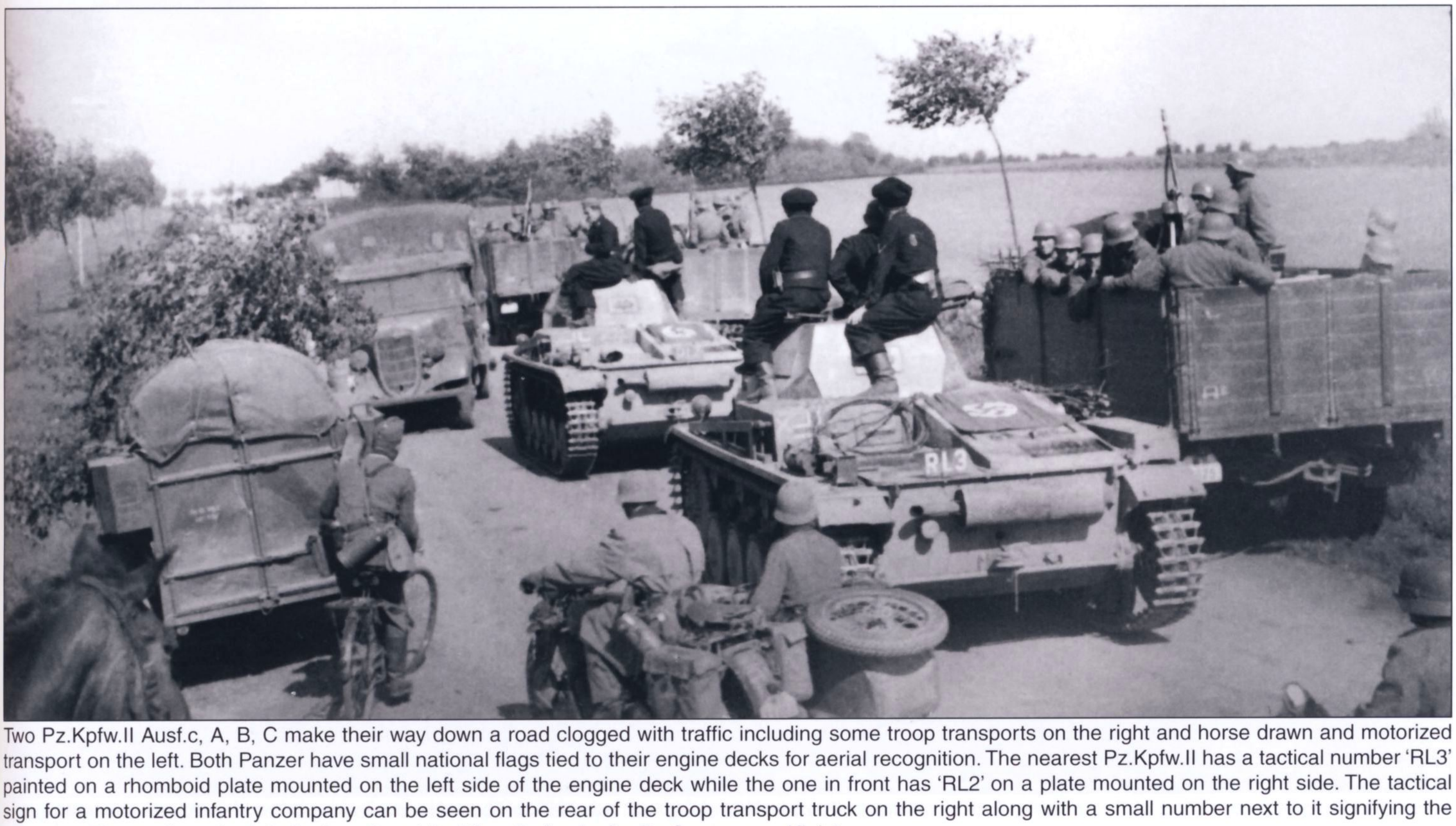
A column of Pz.Kpfw.II's from Pz.Rgt.7 from 10.Panzer-Division advance through a French village in May 1940. The style of visor flaps on the rear of the turret and hull identify this as an Ausf.C. A censor has blacked out the tactical number on the rhomboid plate on the rear of the nearest vehicle but curiously, he failed to censor the regimental emblem, the outline of a bison painted on the rear of the turret. On an original German wartime colored postcard, the outline was painted in light blue but it is uncertain if it was painted in different colors in the companies or regiments. Note as well the white aerial recognition panel painted on the engine deck.



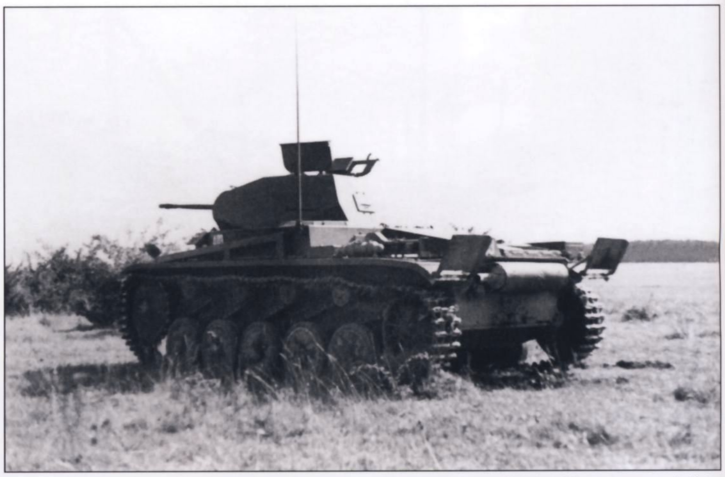
A Pz.Kpfw.II Ausf.C from Pz.Rgt.15 of the 5.Panzer-Division stands in front of a French cathedral in May 1940. The tactical number '11' is painted in white above a white rhomboid on both sides and the rear of the turret. Again, the style of the visor on the rear of the turret identifies the vehicle as an Ausf.C.



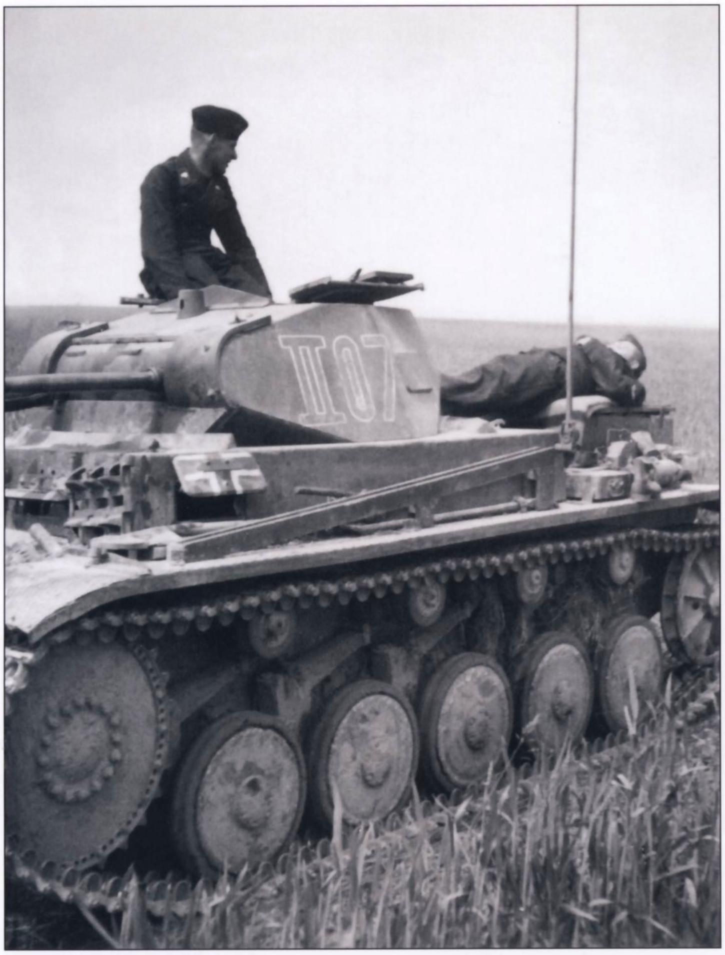
A column of Pz.Kpfw.II Ausf.A, B, C from Pz.Rgt.3 of the 2.Panzer-Division roll through a Greek city during Operation 'Marita' in April 1941. The additional 30mm armor plates on the front of the hull, superstructure and turret can be clearly seen in this photo. The tactical emblem for 2.Panzer-Division, an inverted 'Y' with a single vertical line to the right, can be seen on the front plate beside the driver's visor. The division was equipped with 45 Pz.Kpfw.II at the beginning of the campaign.



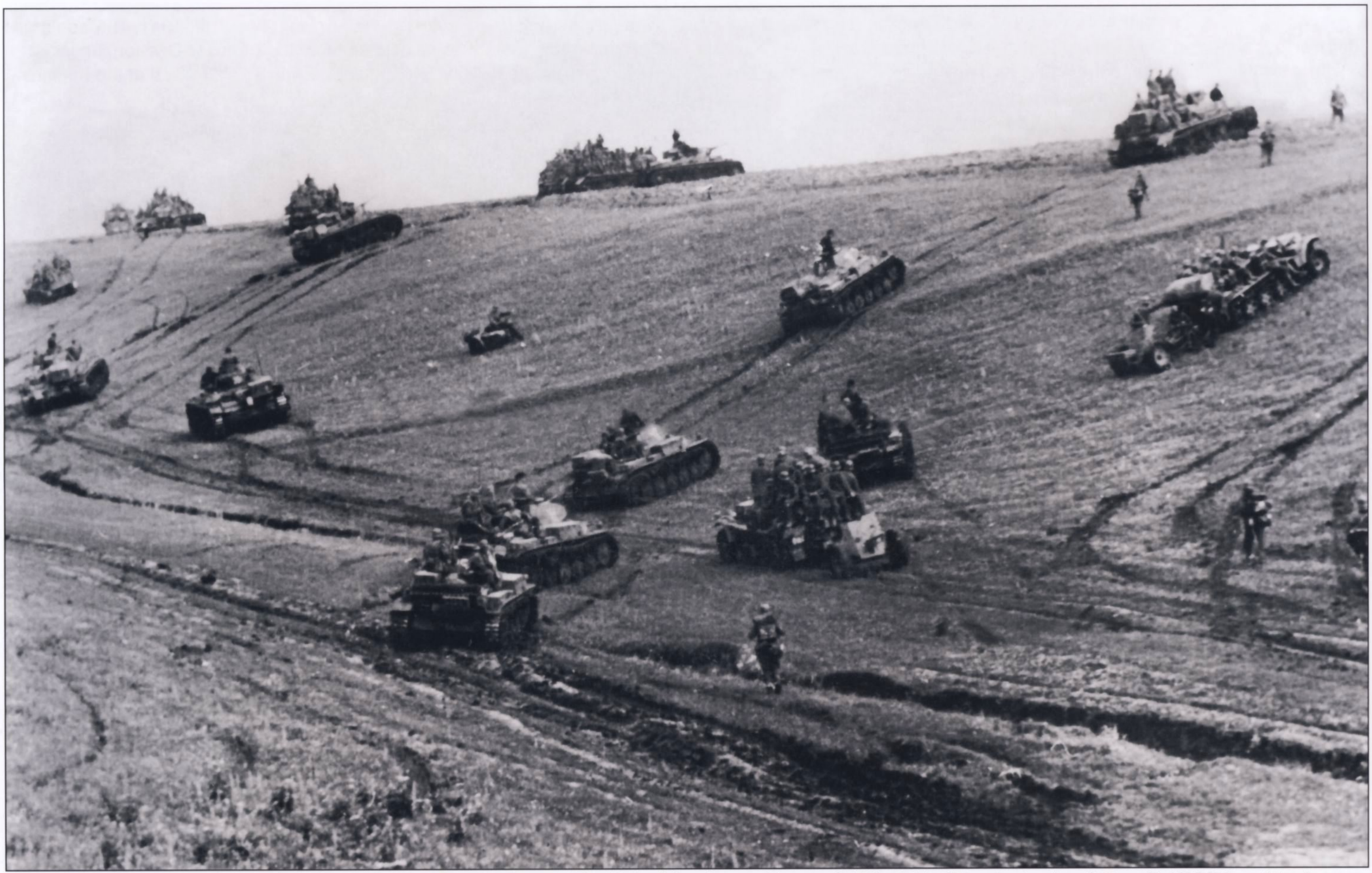
Two Pz.Kpfw.II Ausf.c, A, B, C make their way down a road clogged with traffic including some troop transports on the right and horse drawn and motorized transport on the left. Both Panzer have small national flags tied to their engine decks for aerial recognition. The nearest Pz.Kpfw.II has a tactical number 'RL3' painted on a rhomboid plate mounted on the left side of the engine deck while the one in front has 'RL2' on a plate mounted on the right side. The tactical sign for a motorized infantry company can be seen on the rear of the troop transport truck on the right along with a small number next to it signifying the company. The truck on the left displays the white 'K' on its fender for Pz.Gruppe von Kleist.



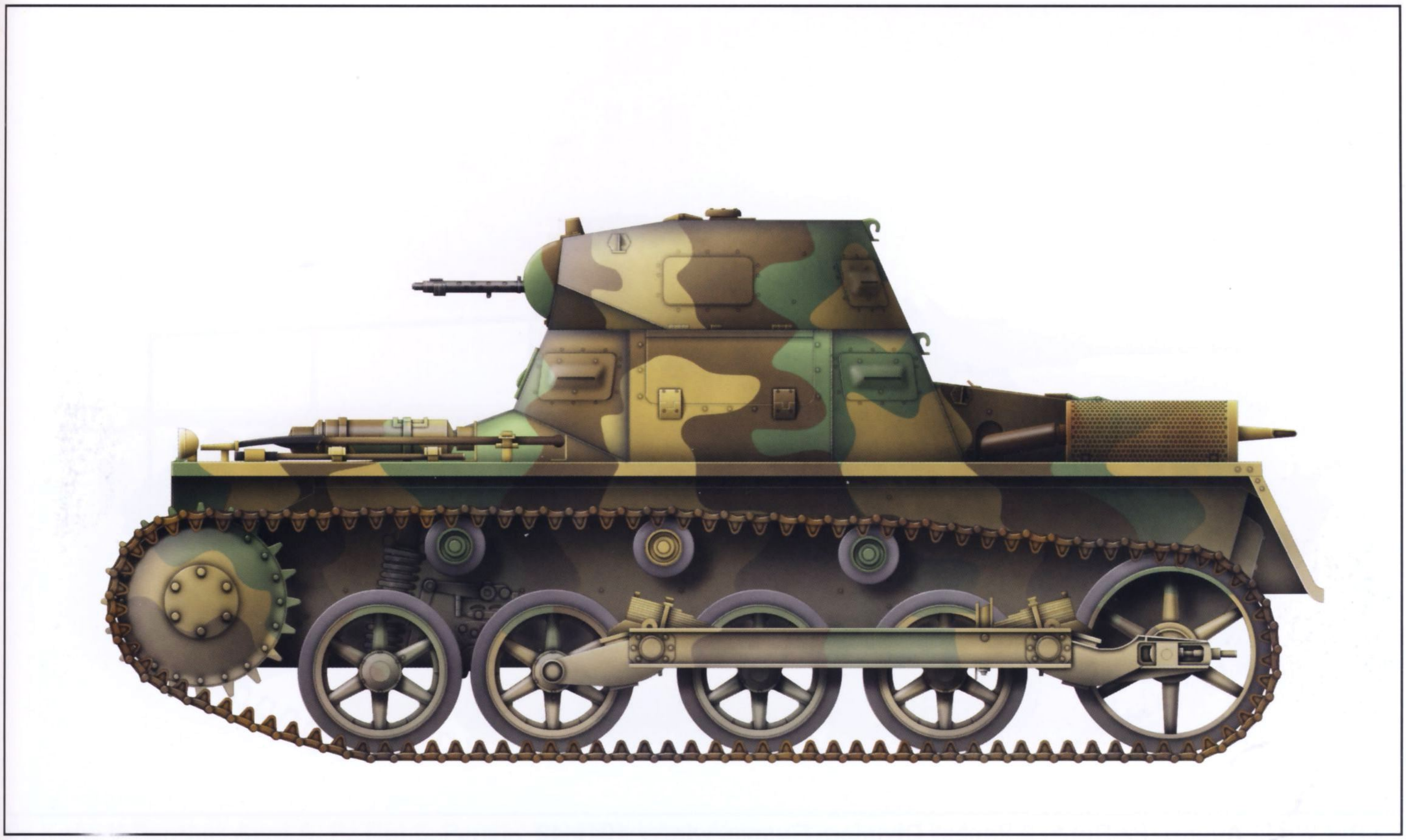
A Pz.Kpfw.II Ausf.C sits seemingly abandoned in a field without any visible damage. The hinged rear fenders can be seen to good effect here whereas in most other photos the fenders are missing. The tactical number '403' is painted in white on small rhomboid shaped metal plates mounted on the left fender and on the rear of the hull, just visible behind the raised rear fender.



This Pz.Kpfw.II Ausf.A or B is most likely from Pz.Rgt.25 of the 7.Panzer-Division in Russia in the summer of 1941. The large tactical numbers in red with a white outline are typical of this unit and indicate that this is a staff vehicle from the second battalion. At this time, 7.Panzer-Division was organized into three battalions each with four companies with a total of 53 Pz.Kpfw.II.

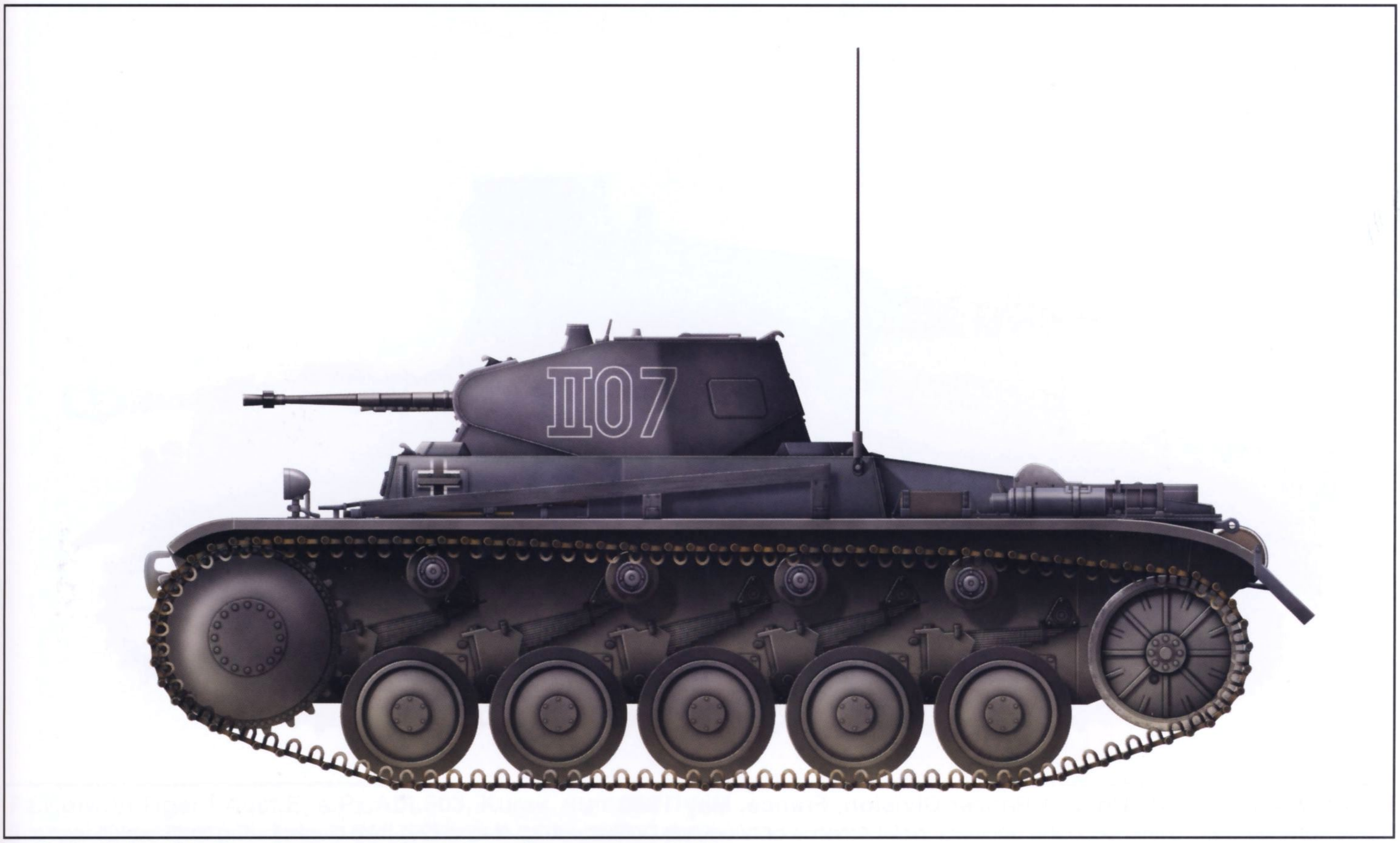


A mixed battle group consisting of Pz.Kpfw.II's, Pz.Kpfw.III's and Pz.Kpfw.IV's along with two Sd.Kfz.10 half-tracks towing 3.7cm PaK35/36 anti-tank guns, advances cautiously over the crest of a ravine in Russia during the summer of 1941.



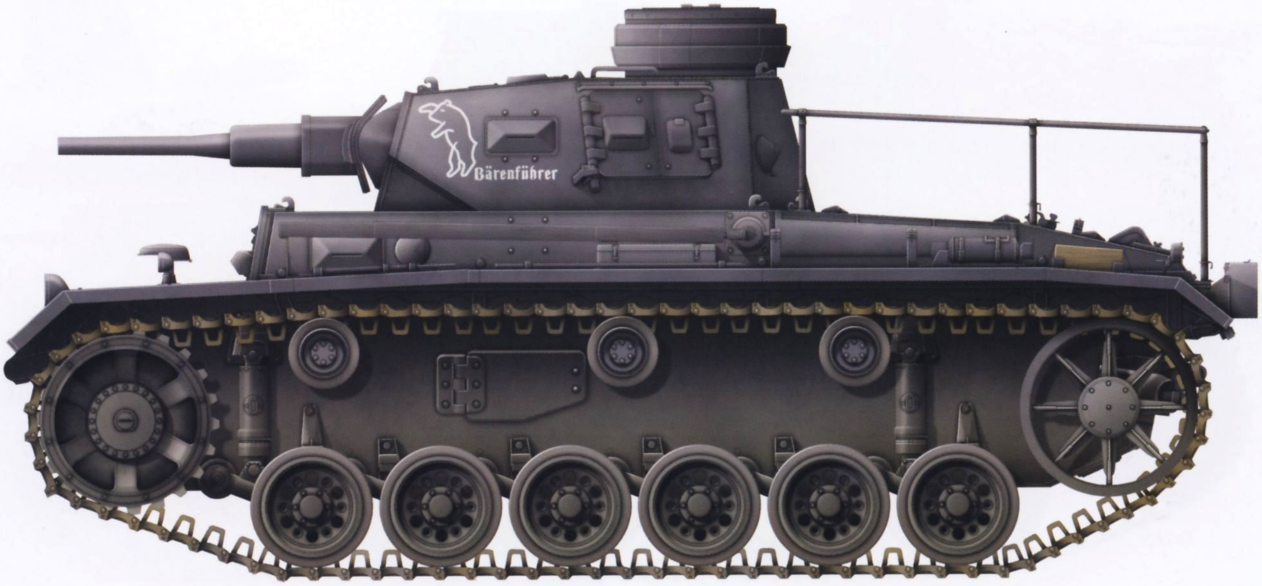
Pz.Kpfw.I Ausf.A, unknown Panzer-Division, Germany, 1935-36

This Pz.Kpfw.I Ausf.A is finished in the three tone pre-war paint scheme called the Buntfarbenanstrich consisting of Nr.17 erdgelb-matt, Nr.18 braun-matt and Nr.28 gruen-matt applied in irregular patches. No markings are visible although there may have been white playing card symbols painted on the rear fenders.



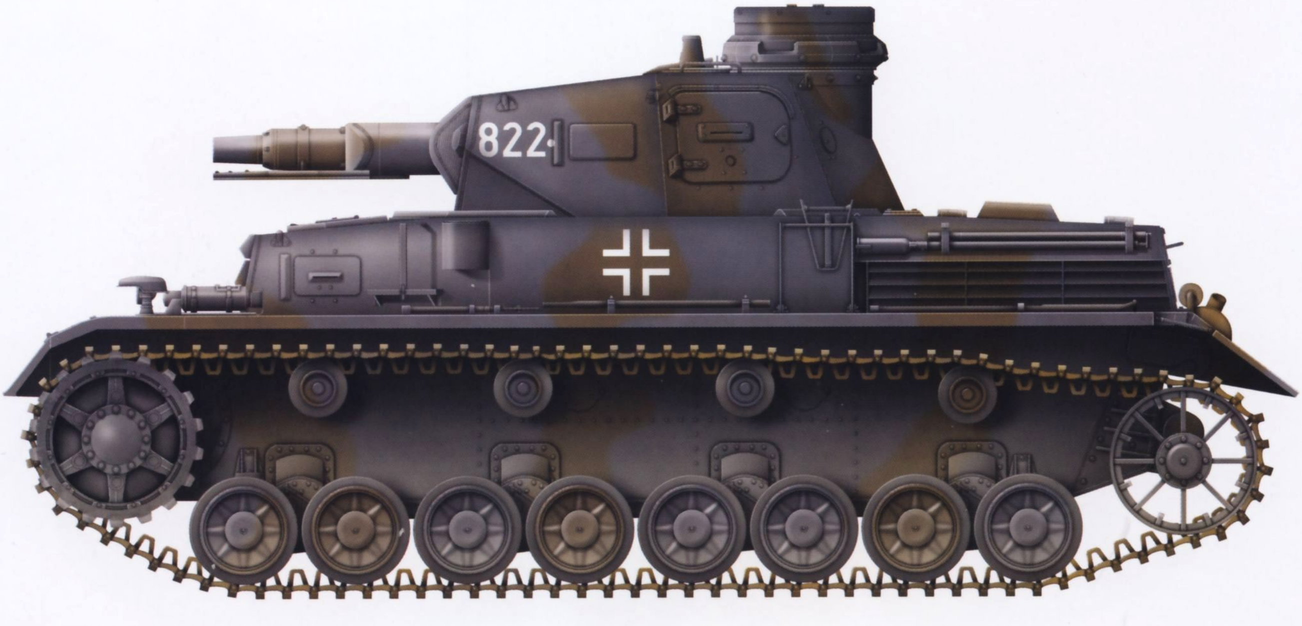
Pz.Kpfw.II Ausf.A-C, unknown Pz.Rgt., Russia, summer 1941

This Pz.Kpfw.II Ausf.A-C is painted in Dunkelgrau RAL 7021. Large white outline tactical number 'II07' is painted on both sides of the turret and a white outlined black Balkenkreuz is painted on the driver's side visor.



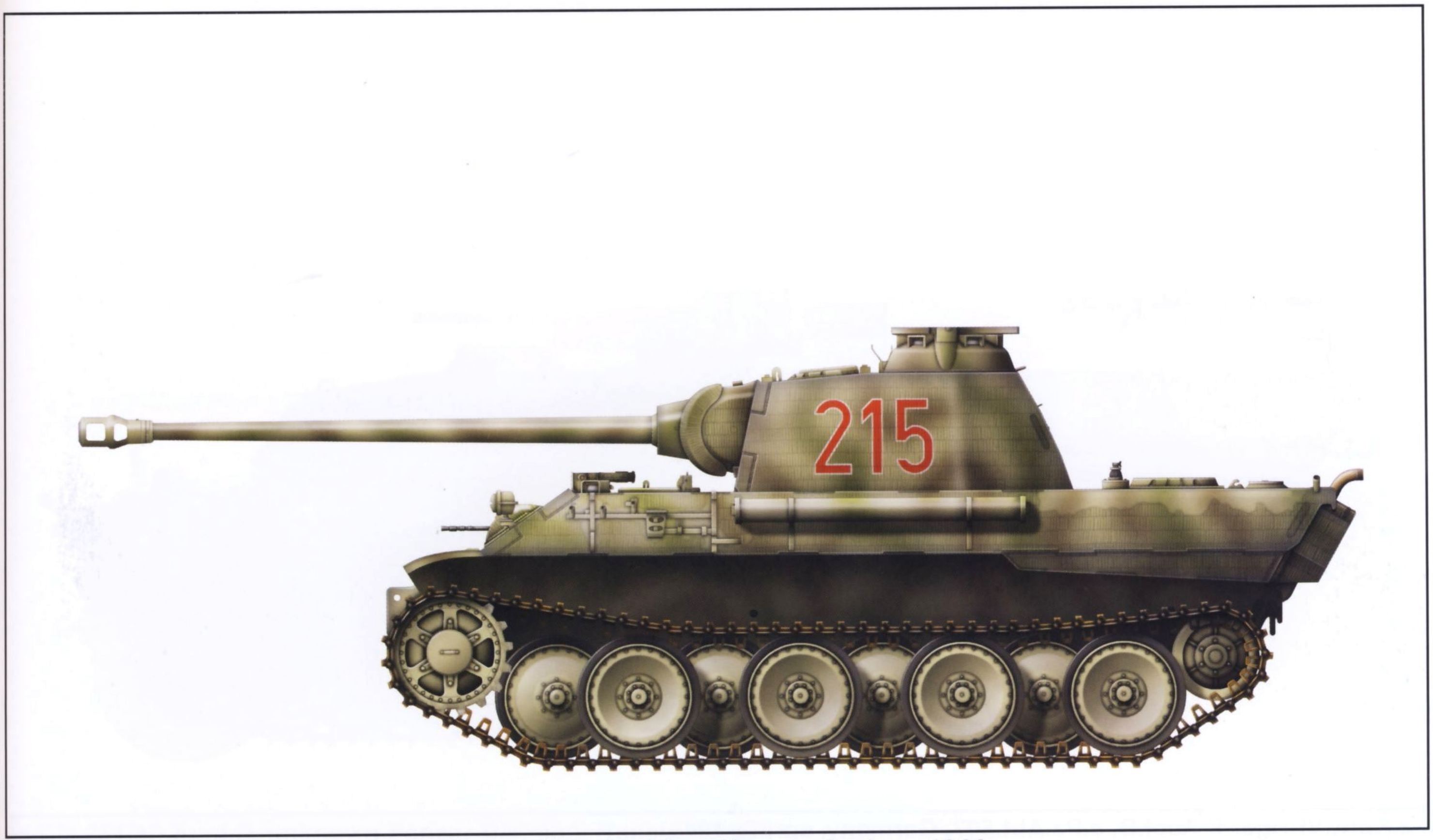
Pz.Bef.Wg.III Ausf.H, Pz.Rgt.6, 3.Panzer-Division, Russia, winter 1941-42

This Pz.Bef.Wg.III Ausf.H is painted in Dunkelgrau RAL 7021 and has the divisional emblem, the 'Berlin Bear', painted in white outline on both sides of the turret along with the name 'Bärenführer'. It has been fitted with the standard cast drive sprocket instead of the normally seen early eight-hole style drive sprocket with spacer ring.



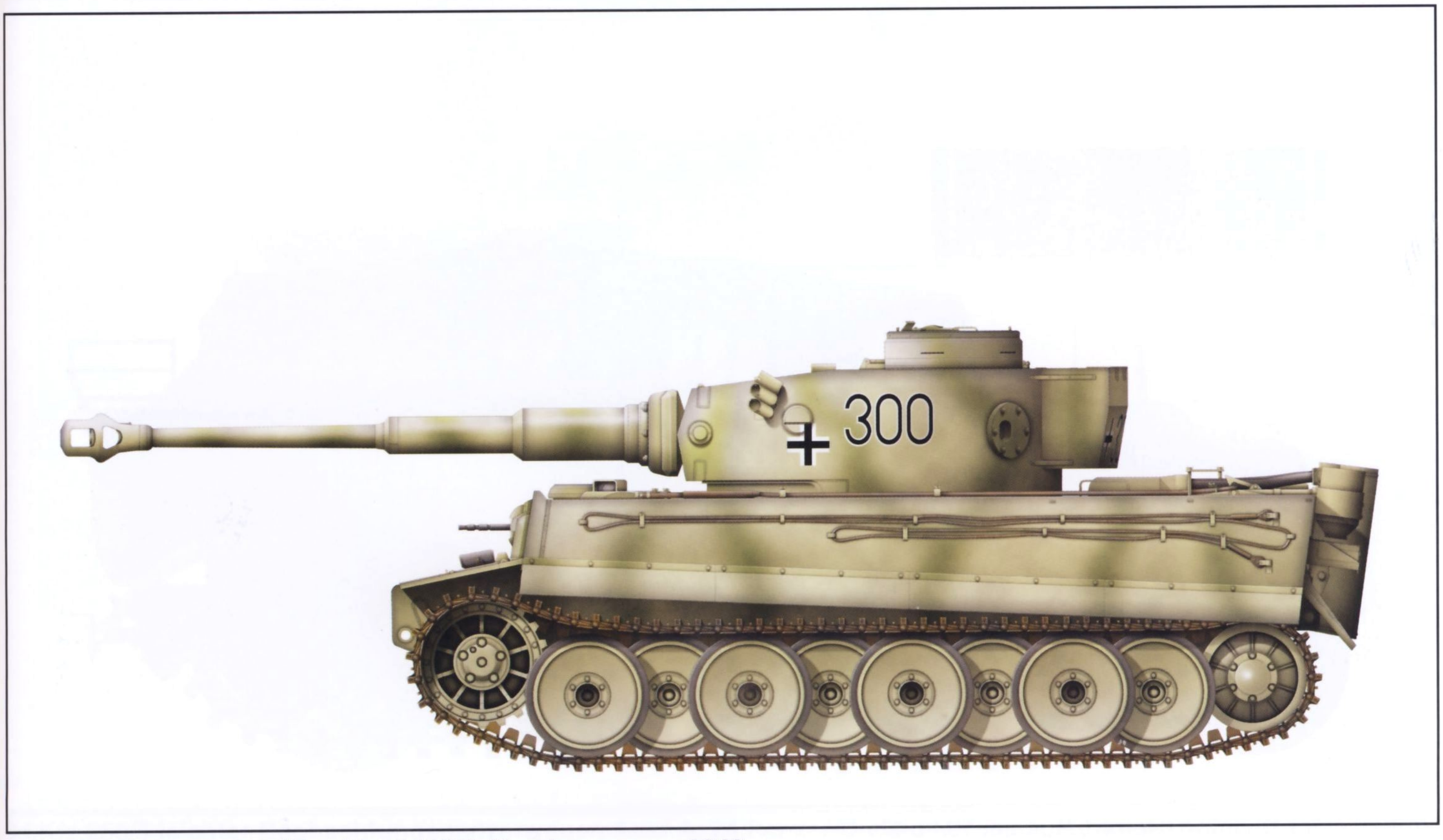
Pz.Kpfw.IV Ausf.C, Pz.Rgt.2, 1.Panzer-Division, France, May 1940

This Pz.Kpfw.IV Ausf.C is finished in the early war paint scheme of two-thirds Dunkelgrau Nr.46 and one-third Dunkelbraun Nr.45, which was most often obscured by dust. Following the campaign in Poland, the large white Balkenkreuz was replaced with a smaller one, in this case simply a white stenciled outline. The three-digit tactical number is painted in white followed by a white dot, indicating Pz.Rgt.2. The division's tactical emblem, a white oak leaf, is painted in white on the front of the turret.



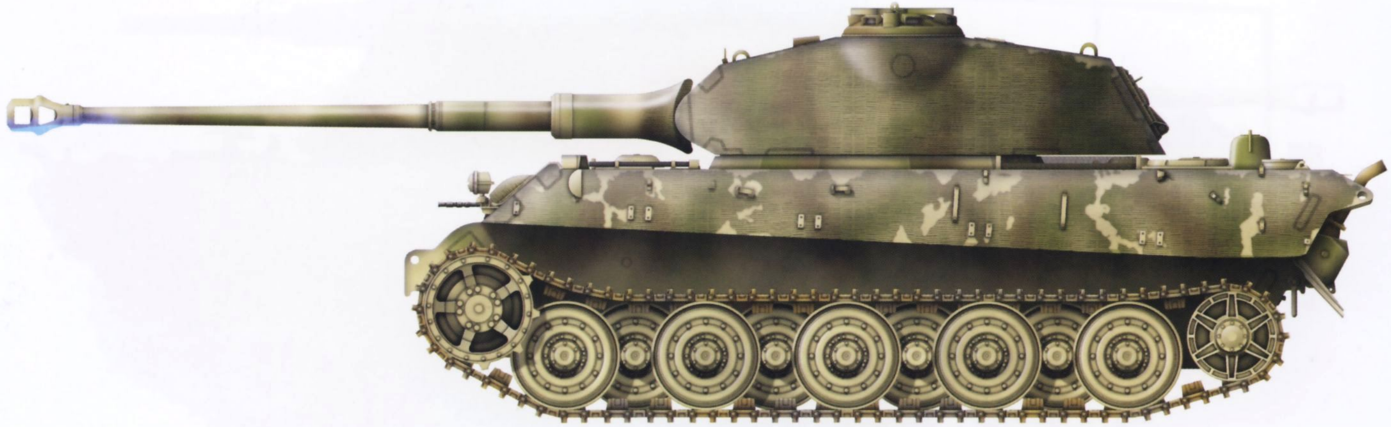
Pz.Kpfw.V Panther Ausf.A, Pz.Rgt.6, Panzer-Lehr-Division, Normandy, June 1944

This Panther Ausf.A is painted in Dunkelgelb RAL 7028 with a camouflage scheme of Rotbraun RAL 8017 and Olivgrün RAL 6003 patches. The large three-digit tactical numbers were painted on each side of the turret in red with a white outline.



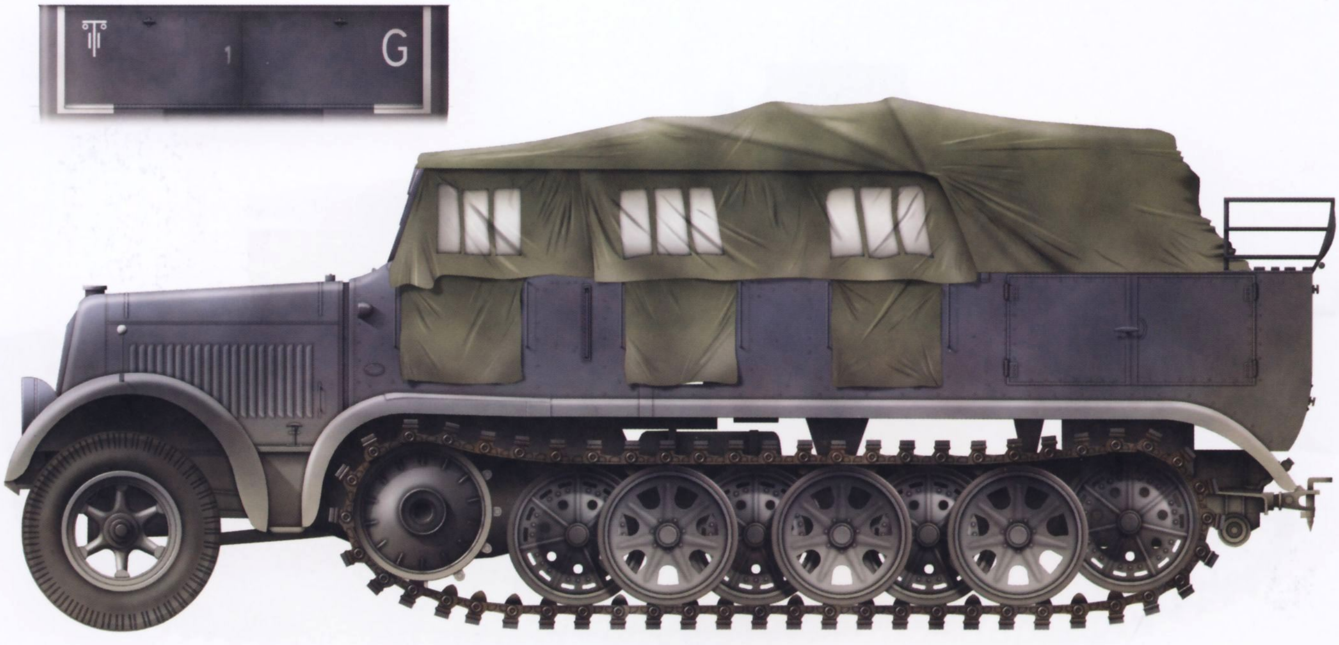
Pz.Kpfw.VI Tiger I Ausf.E, s.Pz.Abt.503, Kursk, summer 1943

This Tiger I is painted in Dunkelgelb RAL 7028 with a lightly applied camouflage scheme of Olivgrün RAL 6003 patches. The three-digit tactical number is painted in black with a white outline on the sides of the turret and is repeated on the lower half of the rear of the stowage bin as well. A newly painted black Balkenkreuz with a white outline is located on each side of the turret and, typical of 3.Kompanie vehicles, on either side of the number on the stowage bin.



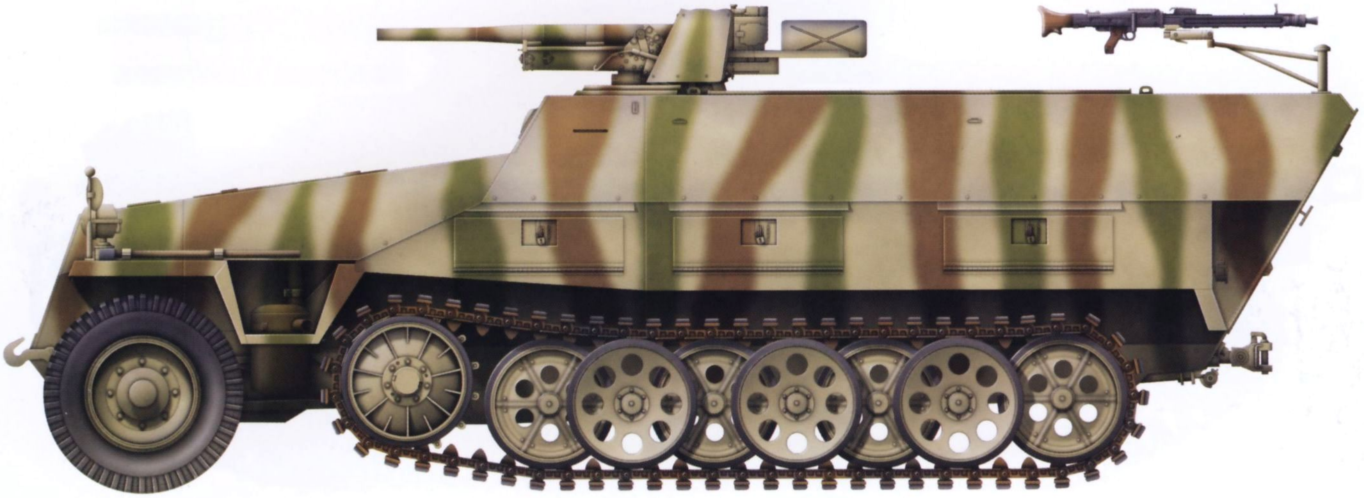
Pz.Kpfw.VI Tiger II Ausf.B, s.Pz.Abt.507, Germany, spring 1945

This early production Pz.Kpfw.VI Tiger II Ausf.B is most likely painted in Dunkelgelb RAL 7028 with a camouflage scheme of Rotbraun RAL 8017 and Olivgrün RAL 6003 patches. It is one of the first six Tiger II's received by s.Pz.Abt.507 in late January or early February 1945 and is unusual in that it was still fitted with the initial pattern multi-piece battle tracks. No markings are visible.



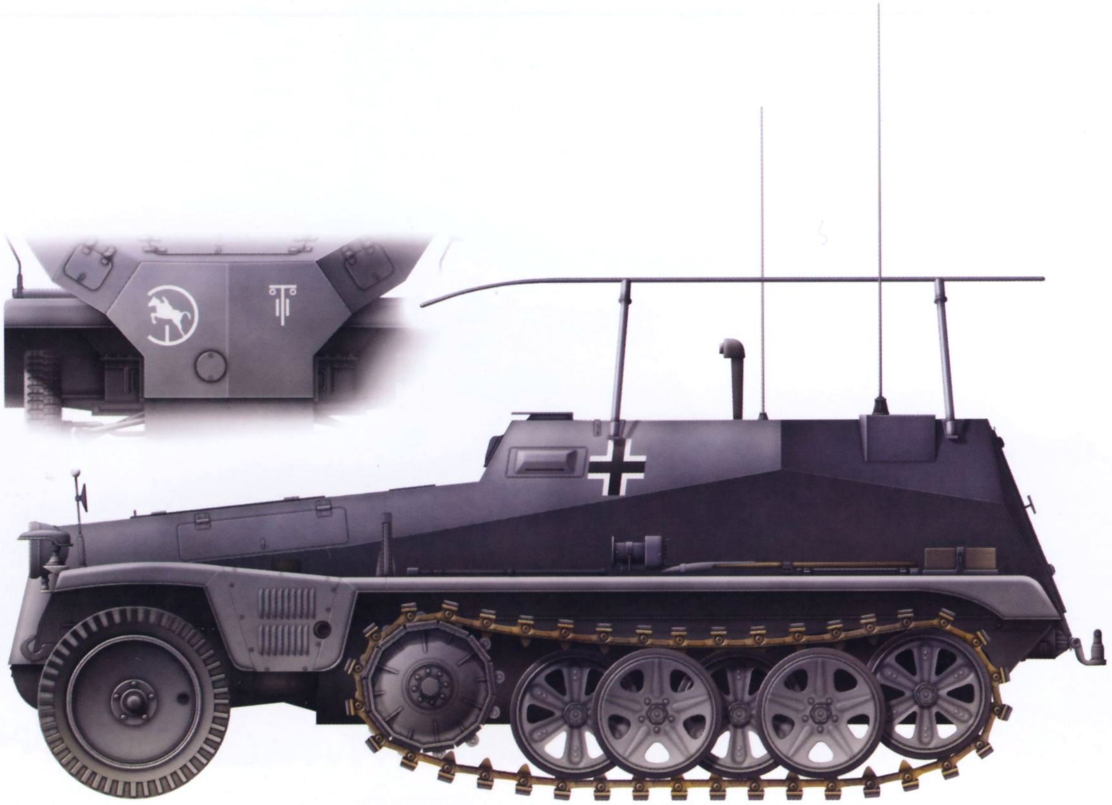
Sd.Kfz.7, SS-Division 'Reich', Russia, 1941-42

This Sd.Kfz.7 from the artillery regiment of SS-Division 'Reich' is finished in Dunkelgrau RAL 7021. White width indicator stripes have been painted along the outer and part of the lower edges of the double doors on the rear of the body. The tactical sign for a towed artillery unit is painted in white on the upper left door and the letter 'G' signifying Panzer Gruppe Guderian on the right door. It also appears that the number '1' is painted on the left door near the center of the vehicle. On the lower left side, an 'SS' license plate can be seen, the numbers for which have been assumed as they are illegible on the original photo.



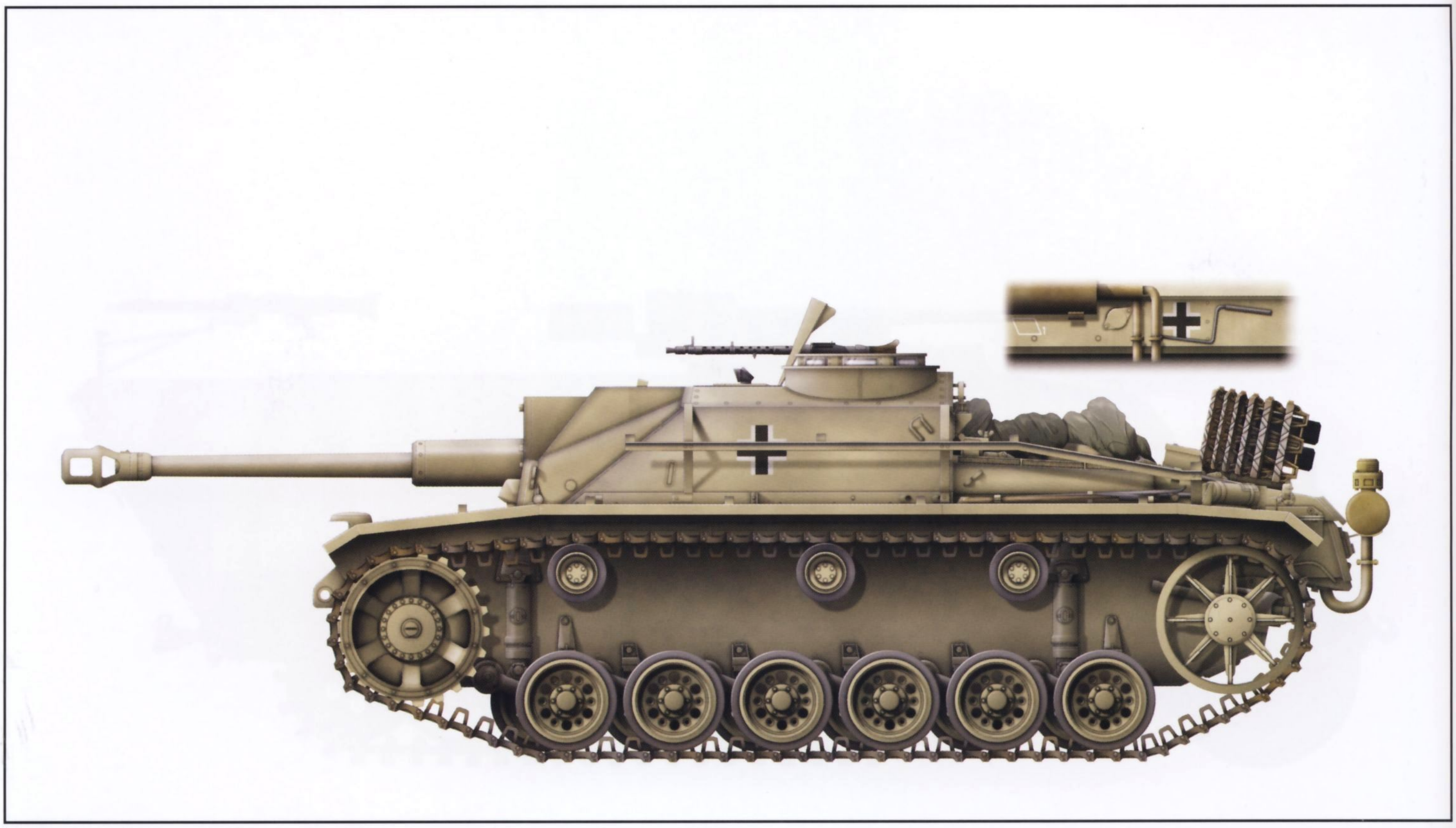
Sd.Kfz.251/10 Ausf.D, unknown Panzer-Division, Russia, 1944

This new Sd.Kfz.251/10 Ausf.D is painted in Dunkelgelb RAL 7028 with a camouflage scheme of Rotbraun RAL 8017 and Olivgrün RAL 6003 vertical stripes.



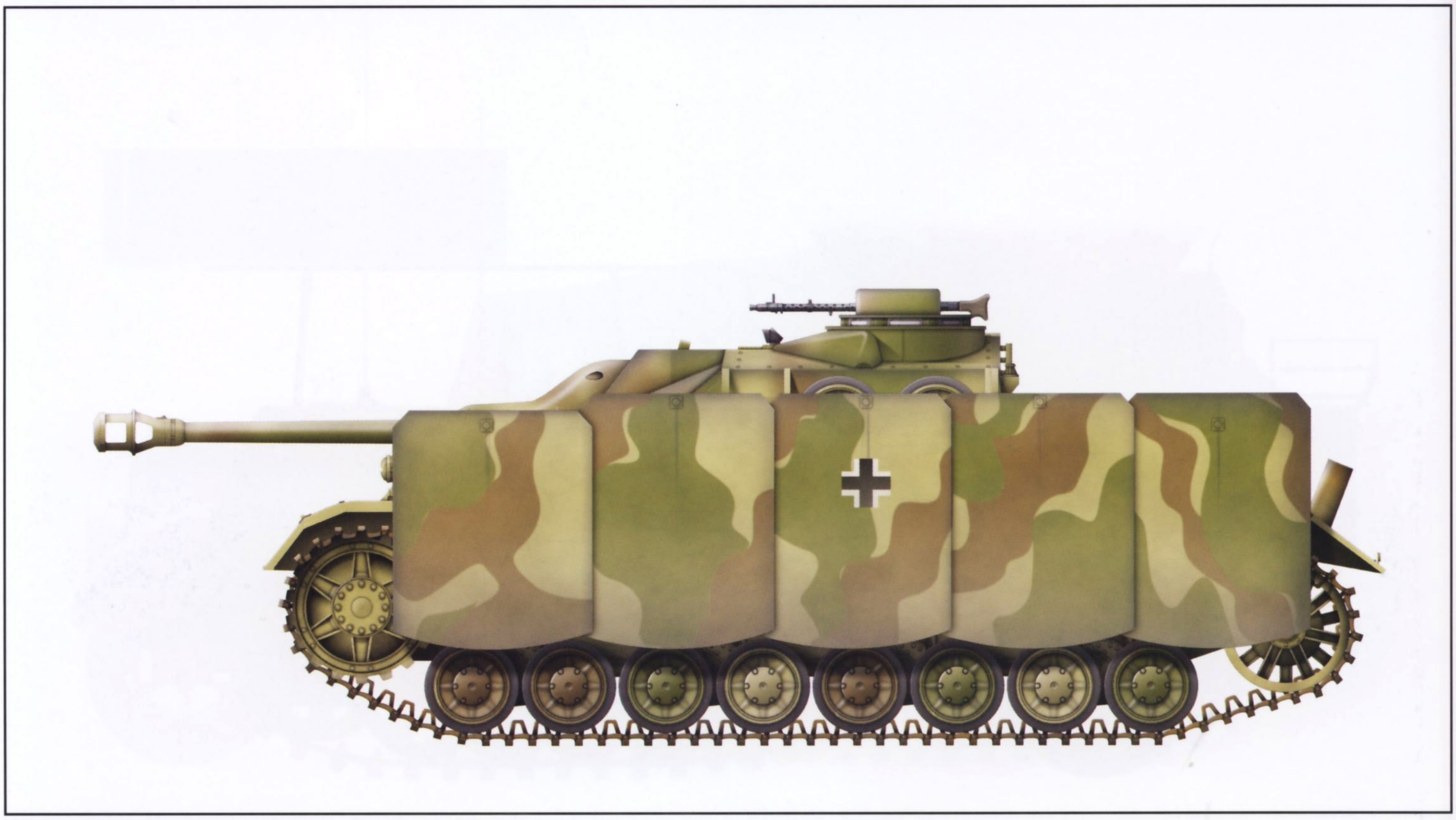
Sd.Kfz.250/5 leichter Beobachtungspanzerwagen Ausf.A, 24.Panzer-Division, Russia, summer 1942

This Sd.Kfz.250/5 leichter Beobachtungspanzerwagen Ausf.A is painted in Dunkelgrau RAL 7021 and is fitted with a large frame antenna for the FuG8 radio, a 2 meter rod antenna for the FuG4 and a 1.4 meter rod antenna for the FuG Spr.Gr.f radio sets. The leaping horseman insignia of 24.Panzer-Division is painted in white on the right rear of the crew compartment and right side of the front plate. The tactical sign for a towed artillery unit is painted in white on the center of the rear door and on the left side of the front plate. A standard black Balkenkreuz with a white outline is painted on both sides of the hull just behind the vision flaps and again on the rear plate beside the door.



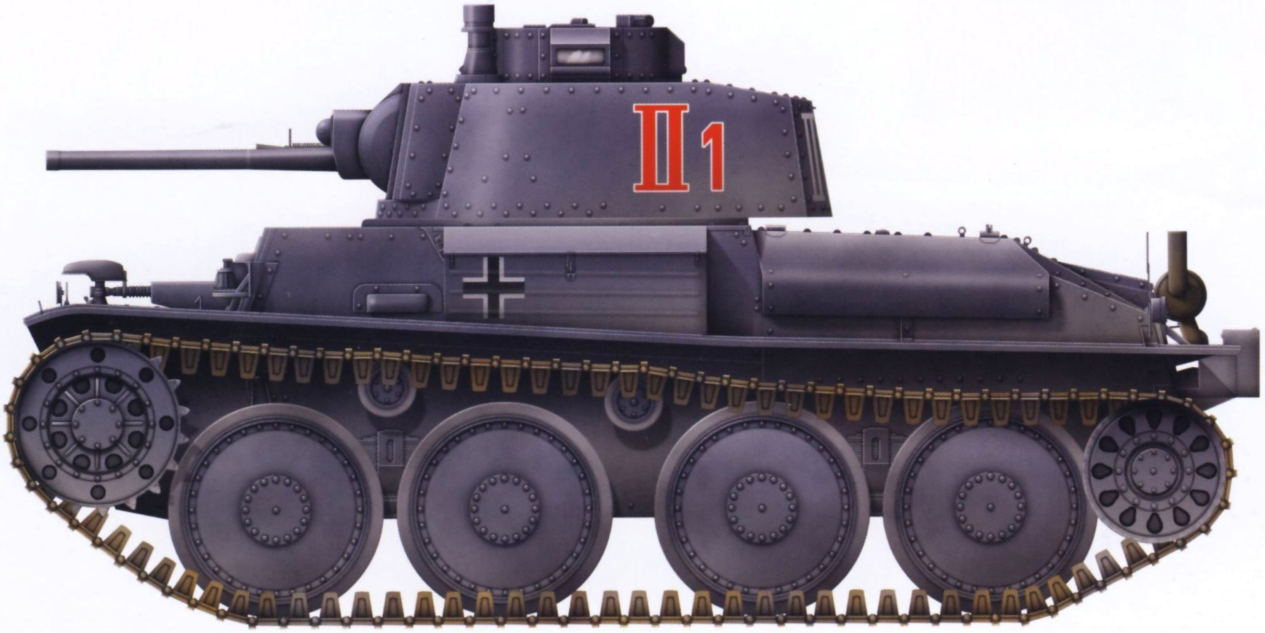
StuG.III Ausf.G, Pz.Abt. Feldherrnhalle, southern France 1943

This StuG.III Ausf.G was manufactured on the chassis of a Pz.Kpfw.III Ausf.M and is fitted with the deep wading exhaust and one-piece transmission access hatches. It is painted in overall Dunkelgelb RAL 7028 and markings were limited to a standard black Balkenkreuz painted on the rear plate to the right of the exhaust pipes and very likely on the sides of the fighting compartment. A white tactical sign for an assault gun company is painted below the muffler with a '1' beside it signifying the company number.

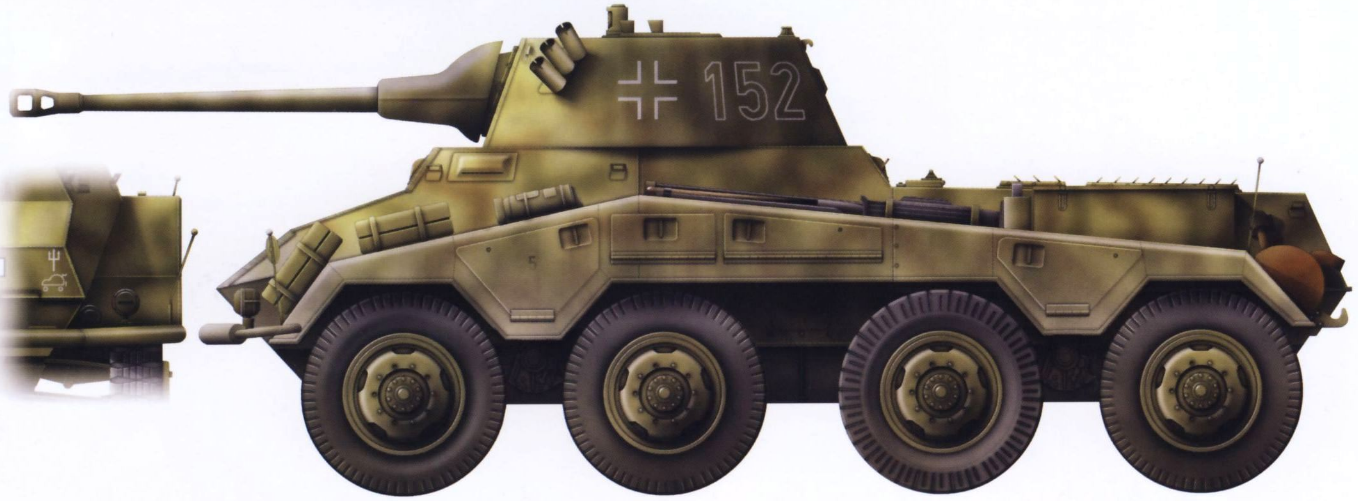


StuG.IV, unknown unit, Russia, fall 1944

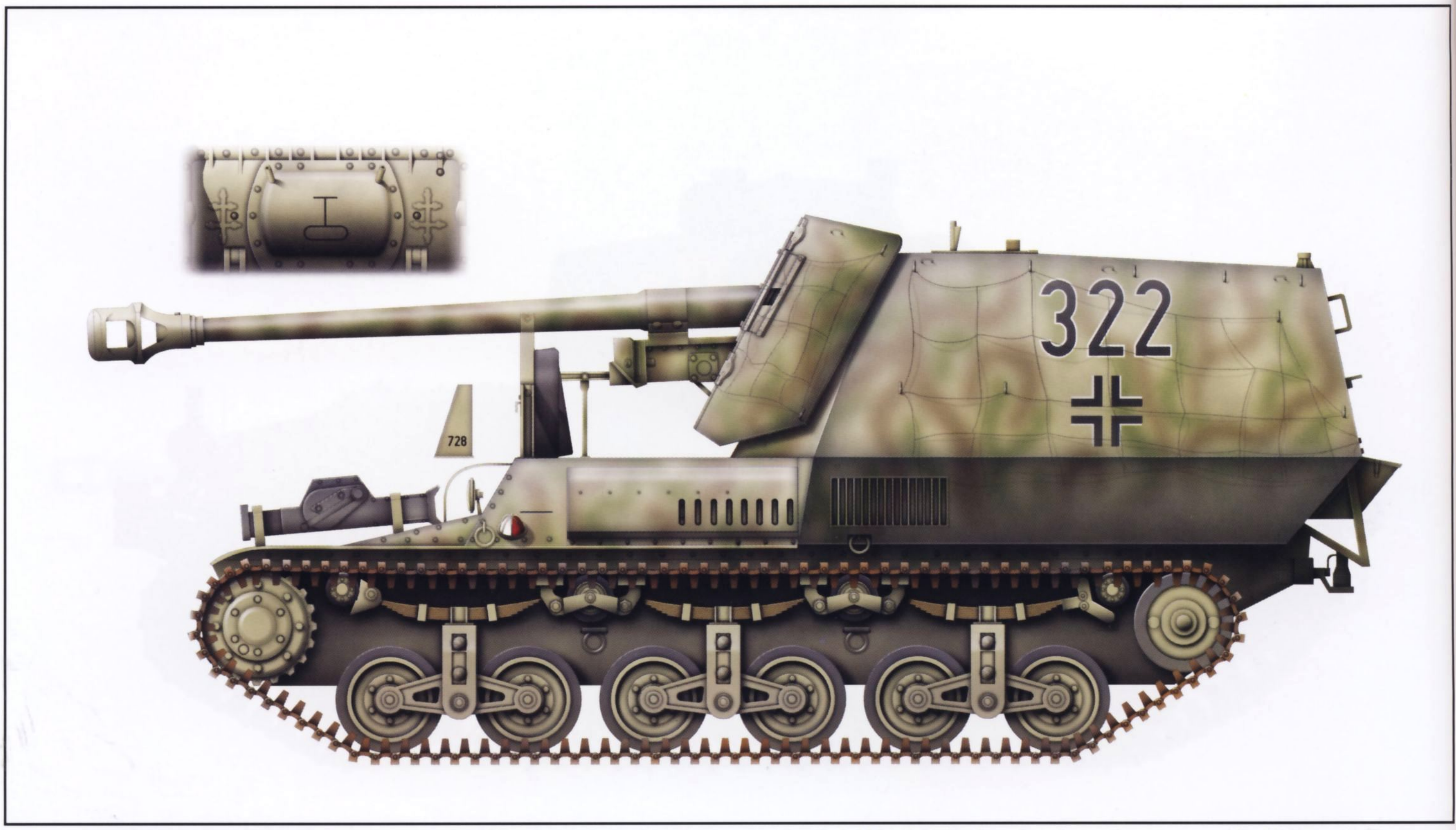
This late production StuG.IV is painted in Dunkelgelb RAL 7028 with a hardedge camouflage scheme of Rotbraun RAL 8017 and Olivgrün RAL 6003 stripes on its Schürzen. The camouflage scheme appears not to have been painted on the vehicle itself which is likely the standard three color camouflage scheme applied with soft edges. A black Balkenkreuz is painted on the center plate and no other markings are visible. The hull side skirts have been rounded on the bottom and modified to hang on the skirt rail from short sections of pipe to prevent them from snagging on obstacles and torn off.



Pz.Bef.Wg.38(t) Ausf.F, Pz.Rgt.25, 7.Panzer-Division, Russia, summer 1942
This Pz.Kpfw.38(t) als Pz.Bef.Wg. Ausf.F is painted in Dunkelgrau RAL 7021. A large red with a white outline tactical number 'II1' is painted on both sides of the turret and is repeated on the rear in solid white, probably for greater visibility from the back. This indicates it is being used as a command vehicle by the second battalion commander. A narrow style white outlined black Balkenkreuz is painted on the side of the stowage bin on the left fender.

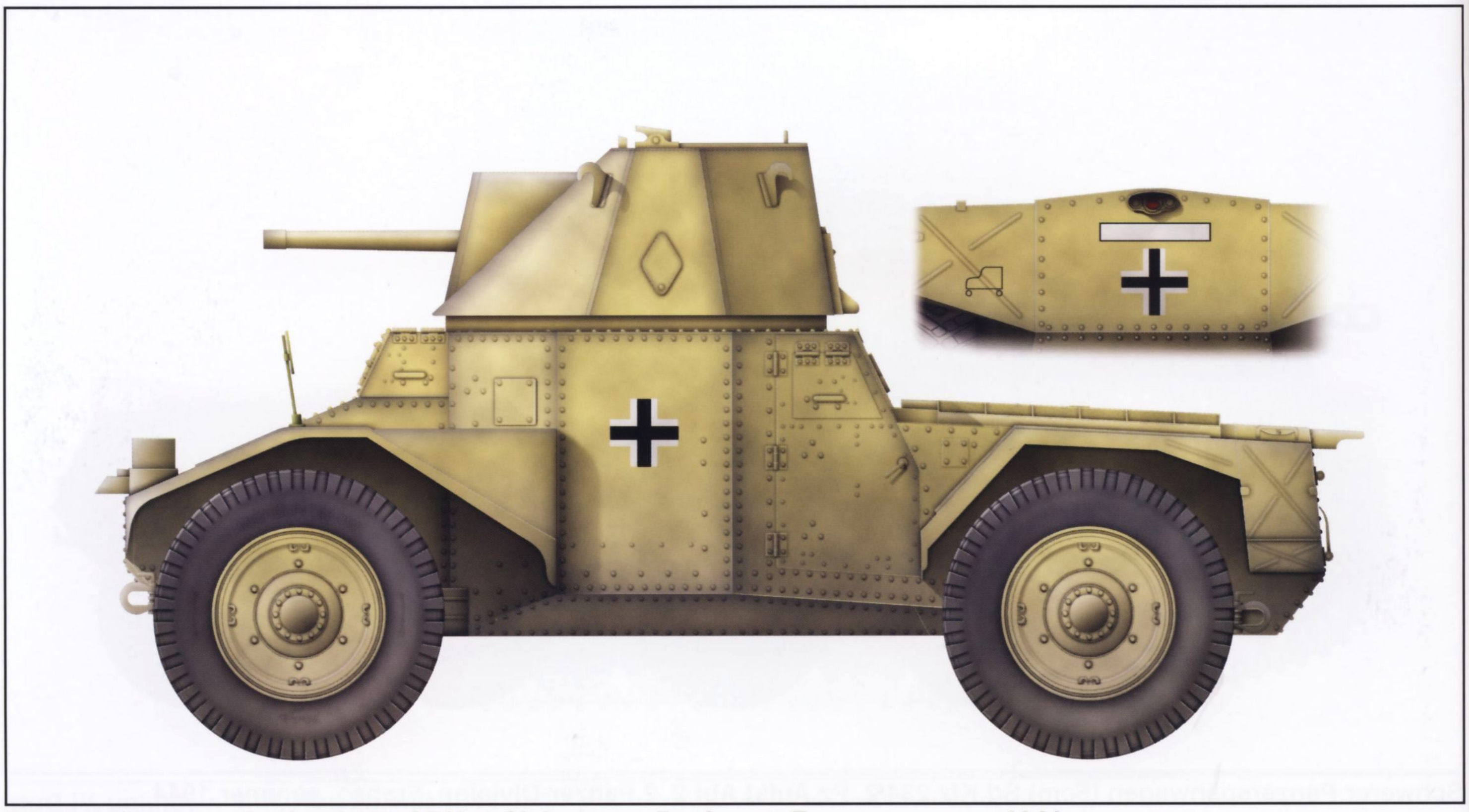


Schwerer Panzerspähwagen (5cm) Sd.Kfz.234/2, Pz.Aufkl.Abt.2, 2.Panzer-Division, France, summer 1944
This eight wheeled armored car is most likely finished in Dunkelgelb RAL 7028 with a camouflage scheme of Rotbraun RAL 8017 and Olivgrün RAL 6003 patches. A white outline three-digit tactical number is painted on both sides of the turret along with a white outline Balkenkreuz. Other markings include a barely visible divisional trident tactical emblem painted in white on the left front plate above the tactical sign for an armored car unit and a black '5' on the forward side stowage bin door. In the original photo, a license plate can be seen but is almost washed out due to the angle of the light on the front plate.



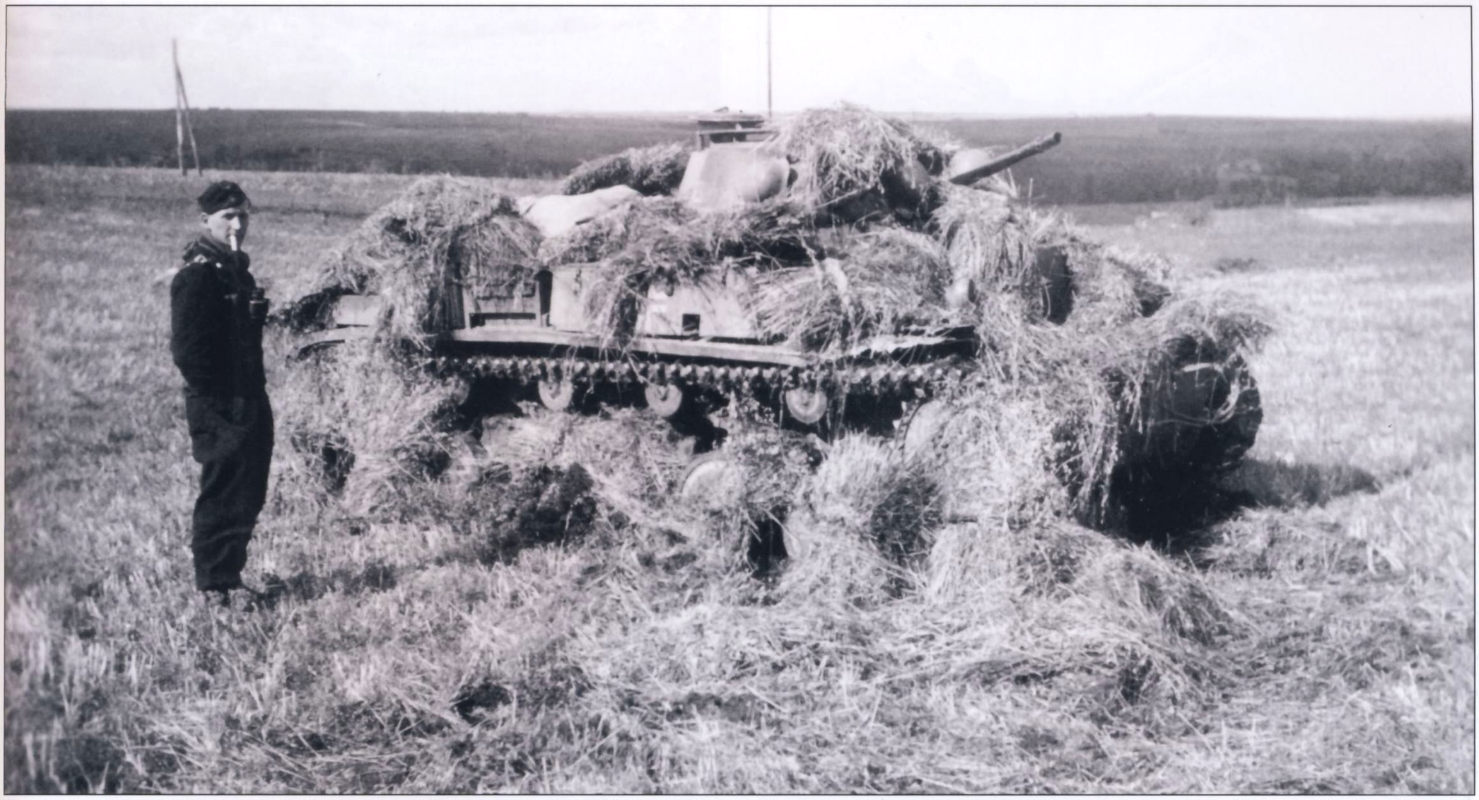
7.5cm PaK40/1 auf Geschützwagen (GW) Lorraine Schlepper (f) (Sd.Kfz.135) Marder I, unknown unit, Vesoul, France, September 1944

This Marder I self-propelled anti-tank gun is painted in Dunkelgelb RAL 7028 with a subtle camouflage scheme of Rotbraun RAL 8017 and Olivgrün RAL 6003 patches. The three-digit stenciled tactical number is painted in black with a white outline on each side along with a black outline Balkenkreuz which in turn has a white outline. The tactical emblem for a self-propelled anti-tank unit is painted in black or red on the front of the transmission housing.

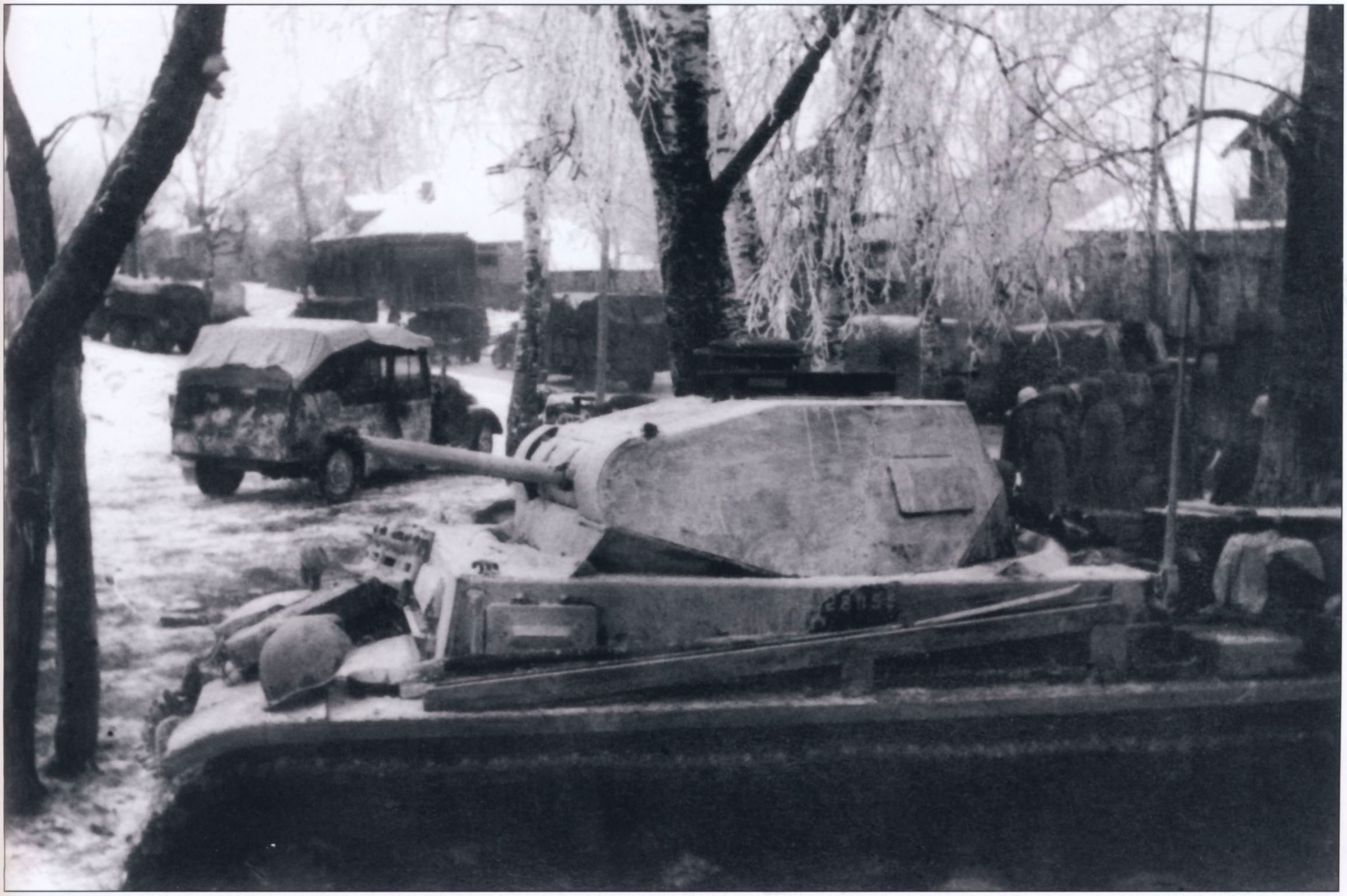


Panzerspähwagen Panhard 178 CDM, 1.Sicherungs-Regiment, France, summer 1944

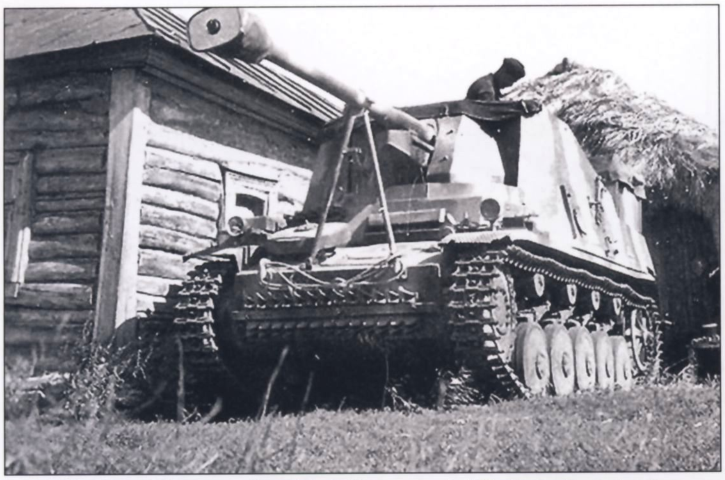
This Panzerspähwagen Panhard 178-P CDM is painted in overall Dunkelgelb RAL 7028. Markings are limited to a narrow style black Balkenkreuz with a white outline with a second, thin black outline, painted on the rear plate and sides of the crew compartment. A standard Wehrmacht vehicle license plate is painted on the rear plate above the national cross and the tactical emblem for an armored car unit with the tactical emblem of a Flak unit above, is painted in black on the left side.



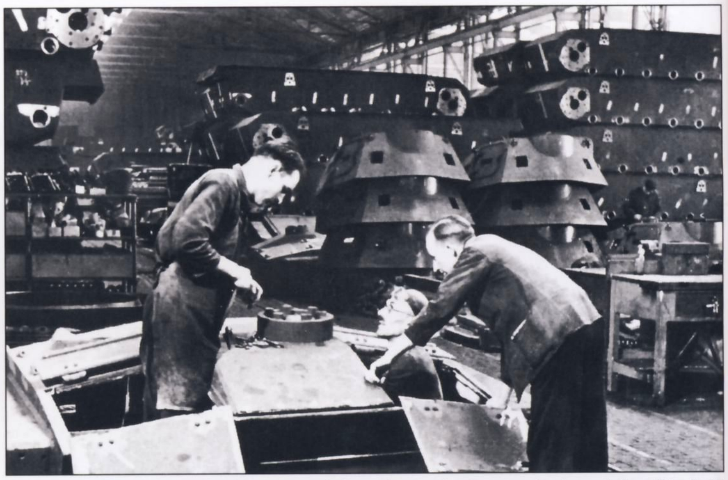
The crew of this Pz.Kpfw.II has done an excellent job of camouflaging their vehicle, making an accurate identification very difficult, but not impossible. The sharp angle of the hull front plate reveals that this is a Pz.Kpfw.II Ausf.C that has been modified by adding the commander's cupola and fender mounted Gepäckkasten or storage bin. A white outline Balkenkreuz can be seen partially hidden by the straw hanging over the edge of the storage bin.



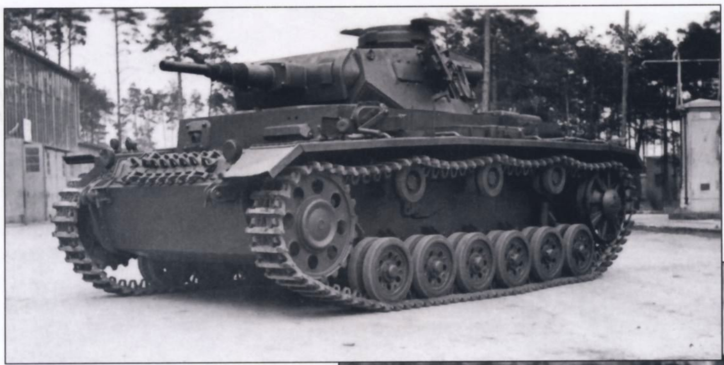
The straight front plate and driver's visor along with the chassis number '28059' positively identify this whitewashed Pz.Kpfw.II Ausf.F in Russia during the winter of 1941-42. Production of the Pz.Kpfw.II Ausf.F began in March 1941 with chassis number '28001' making this one of the first off the assembly line. Other changes include a new commander's cupola, a redesigned idler wheel, thicker frontal armor and a dummy visor mounted to the right of the driver's visor. A total of 523 vehicles were produced to December 1942.



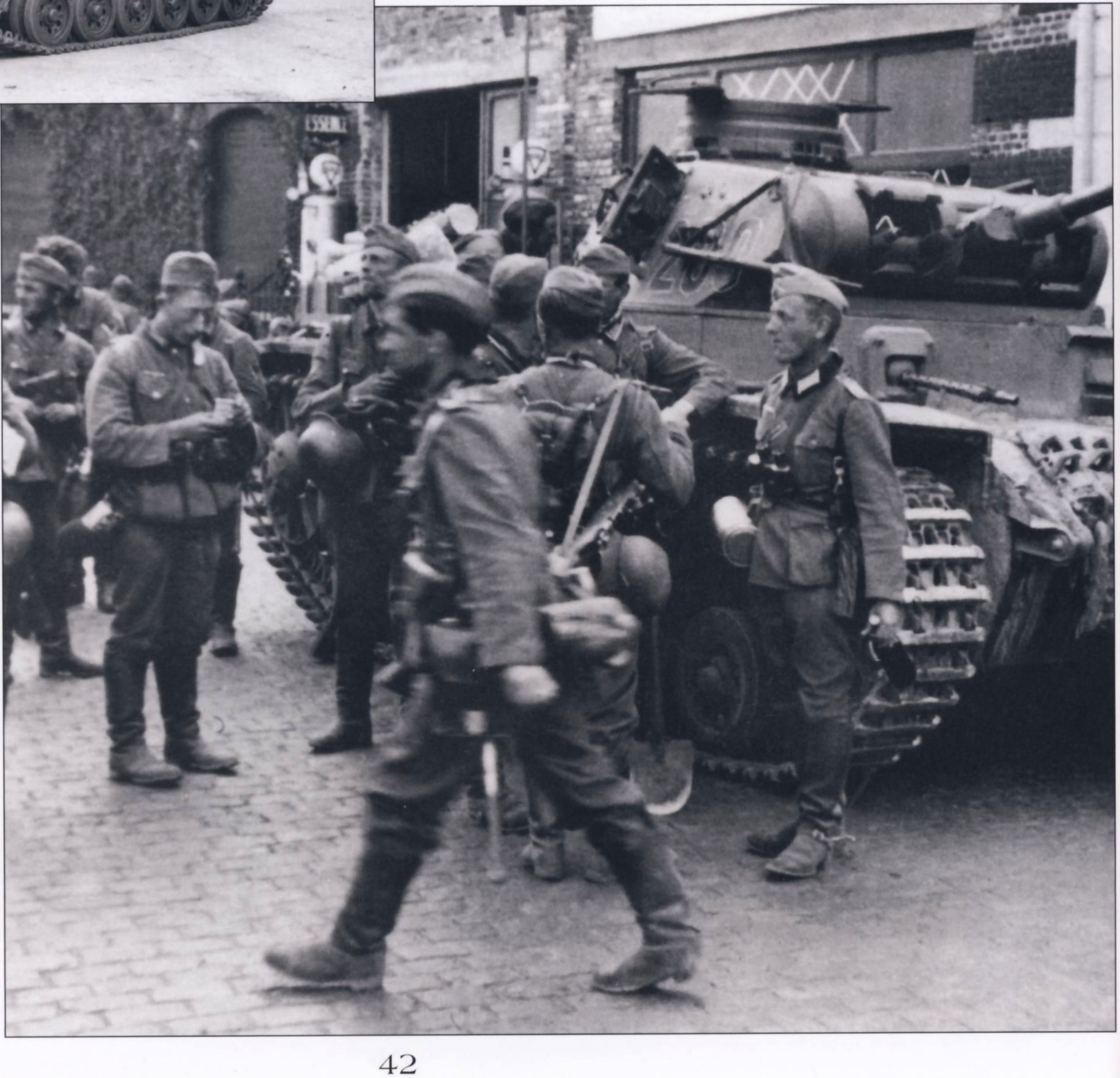
In mid-July 1942, it was ordered that 50 per cent of Pz.Kpfw.II production was to be converted to producing the Panzerjäger II für 7.5cm Pak 40/2 more commonly known as the Marder II. This one was built before January 1943 when the driver's periscope and the two holes in the front plate were deleted. It mounted the deadly 7.5cm Pak 40/2 L/46 anti-tank gun and carried a crew of 3.



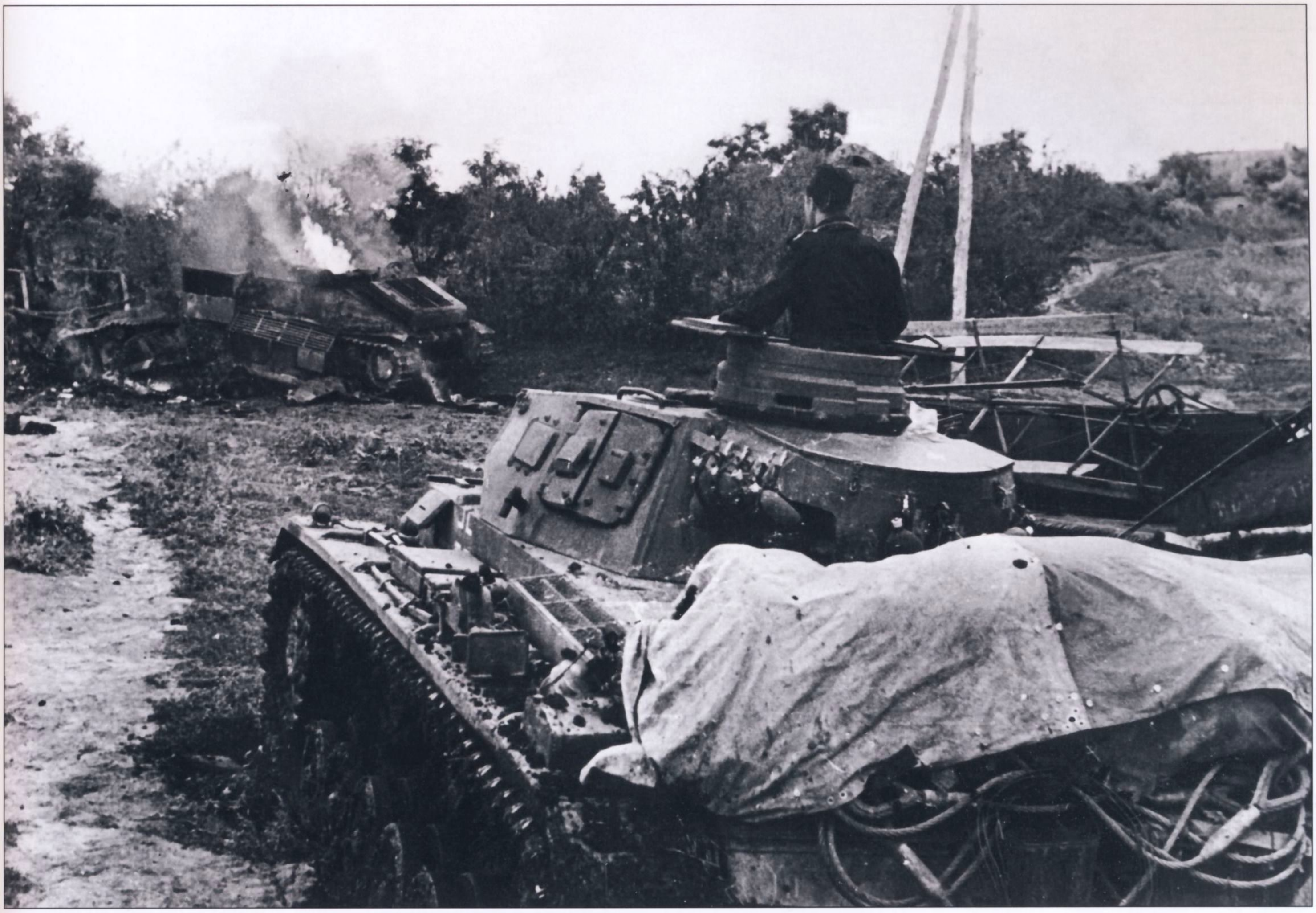
An interesting photo inside one of the plants that manufactured the StuG.III and Pz.Kpfw.III. In the foreground, workers can be seen with the superstructure from a StuG.III Ausf.F or F/8 that featured a large armored housing on the roof for the ventilator fan and were produced from March to December 1942. Interestingly, the turrets stacked in the background with the square pistol port holes all appear to be from Pz.Kpfw.III Ausf.A-D production, the last of which rolled off the assembly line in June 1938. The lower hulls on the left are from Pz.Kpfw.III Ausf.J production while those on the right are from earlier Ausf.H production.



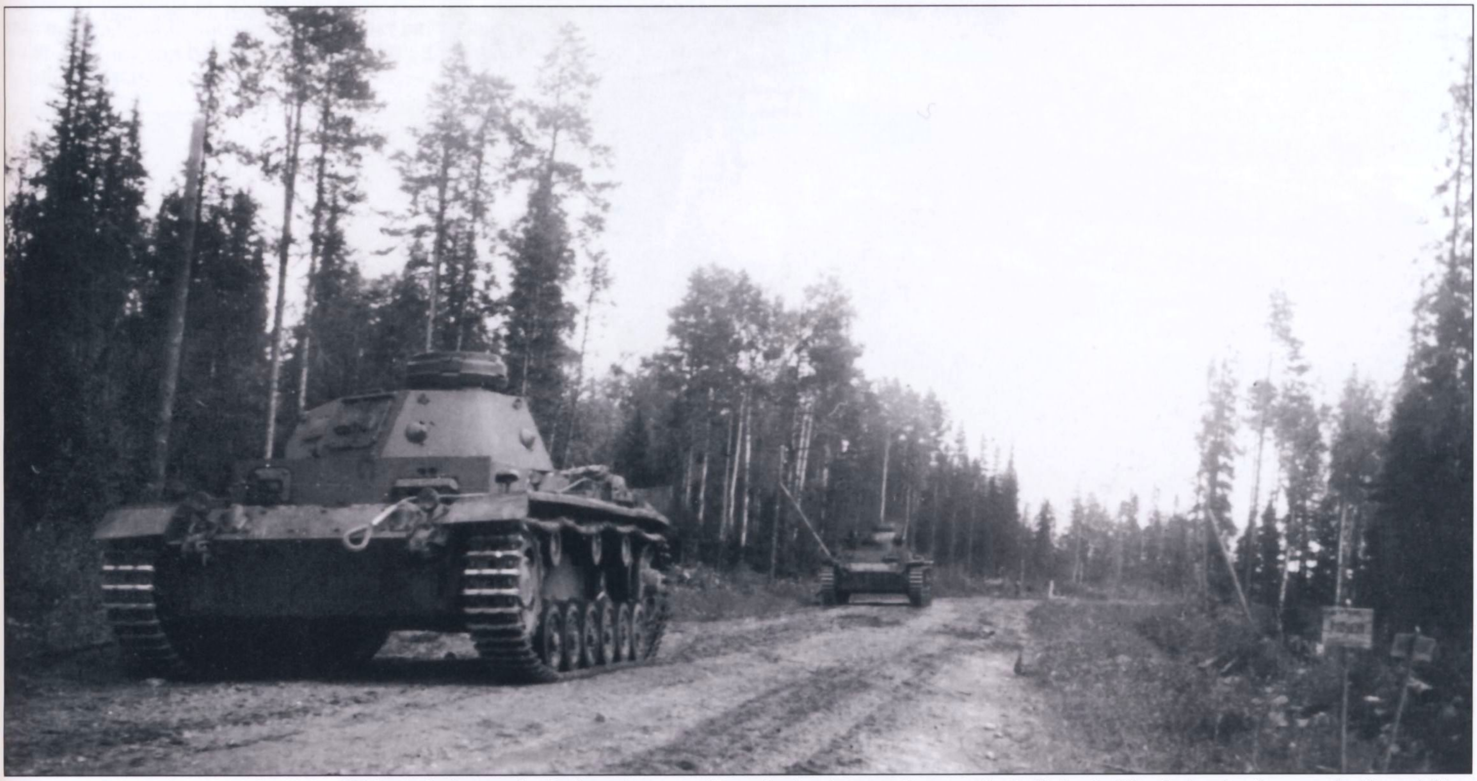
A new Pz.Kpfw.III Ausf.G fitted with the Fahrersehklappe 30, 5cm KwK L/42 gun and reinforced commander's cupola. About 50 Pz.Kpfw.III Ausf.G were equipped with the 3.7cm KwK L/46.5 gun before production was changed over to the 5cm gun. The jack has been removed from its brackets beside the engine compartment ventilation grille and left sitting on the fender.



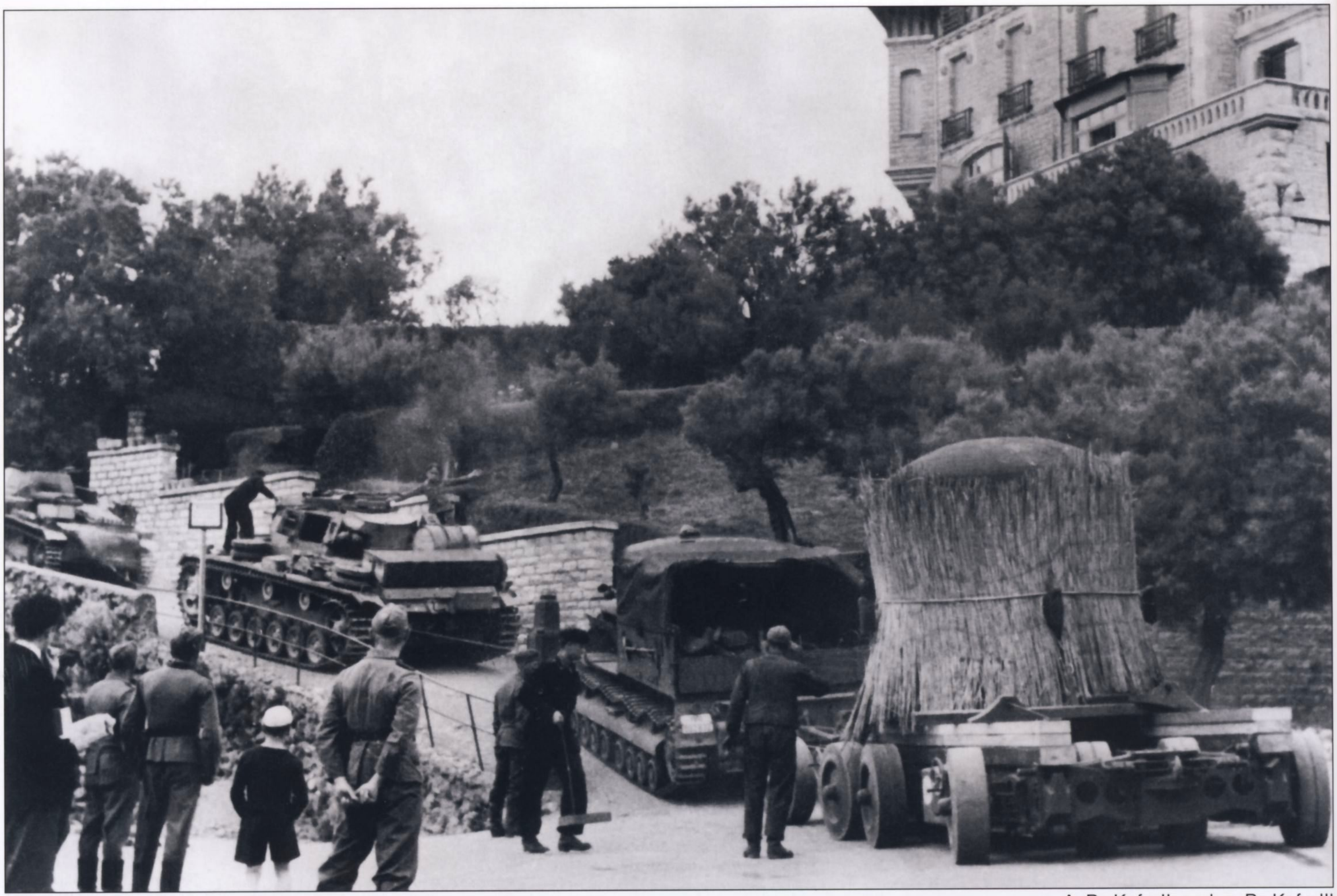
A Pz.Kpfw.III Ausf.E from Pz.Rgt.25 of the 7.Panzer-Division sits on a city street in France while the soldiers appear to be enjoying the spoils of battle liberated from the petrol station in the background. A large three digit tactical number '200' is painted on the side of the turret, probably in red with a white outline.



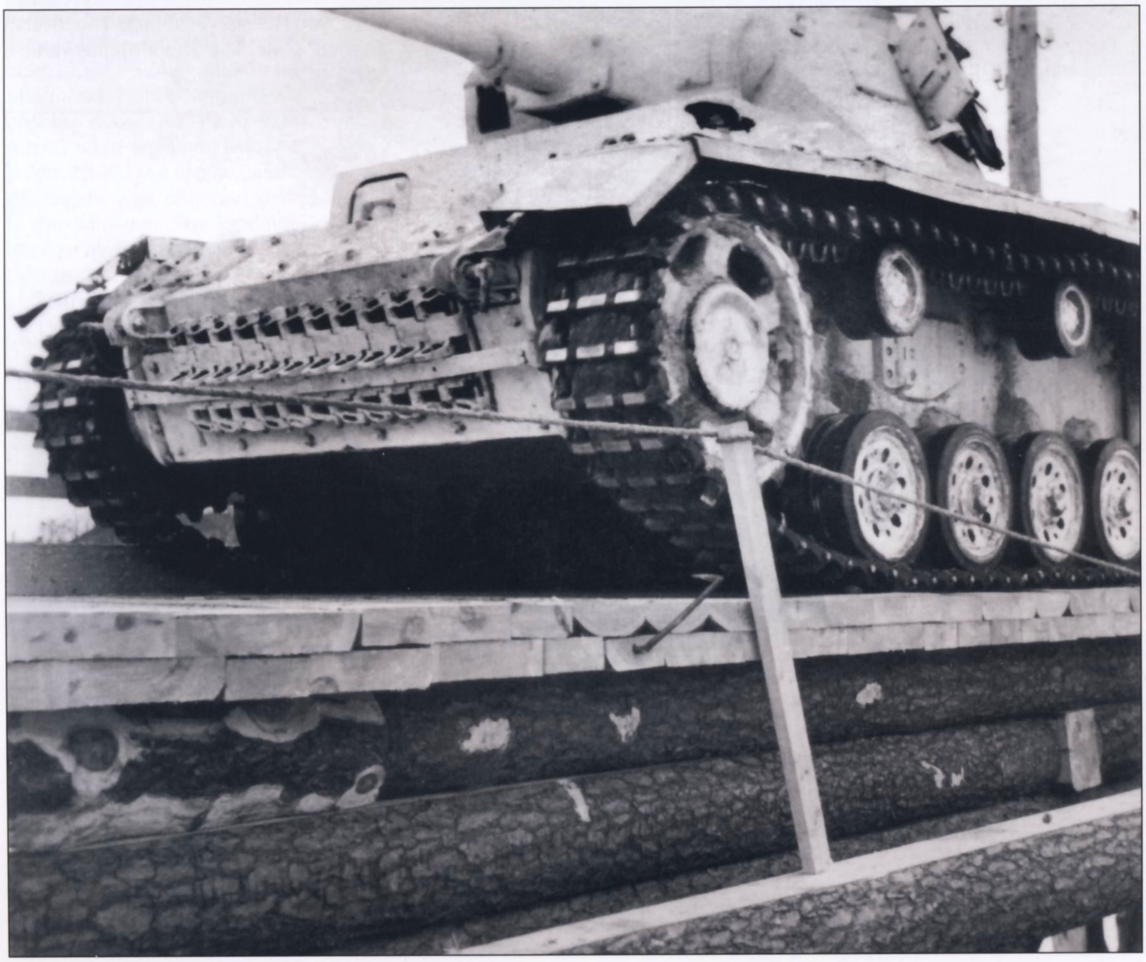
A Pz.Kpfw.III Ausf.G from Pz.Rgt.33 of the 9.Panzer-Division pauses in front of the smoldering wreckage of a totally destroyed Russian T-28 tank. The tactical emblem of 9.Panzer-Division, a 'Y' with two vertical lines beside it, can be seen painted in yellow on the left side of the rear plate. The armor on this vehicle has been increased with additional 30mm plates on the front of the hull and superstructure.



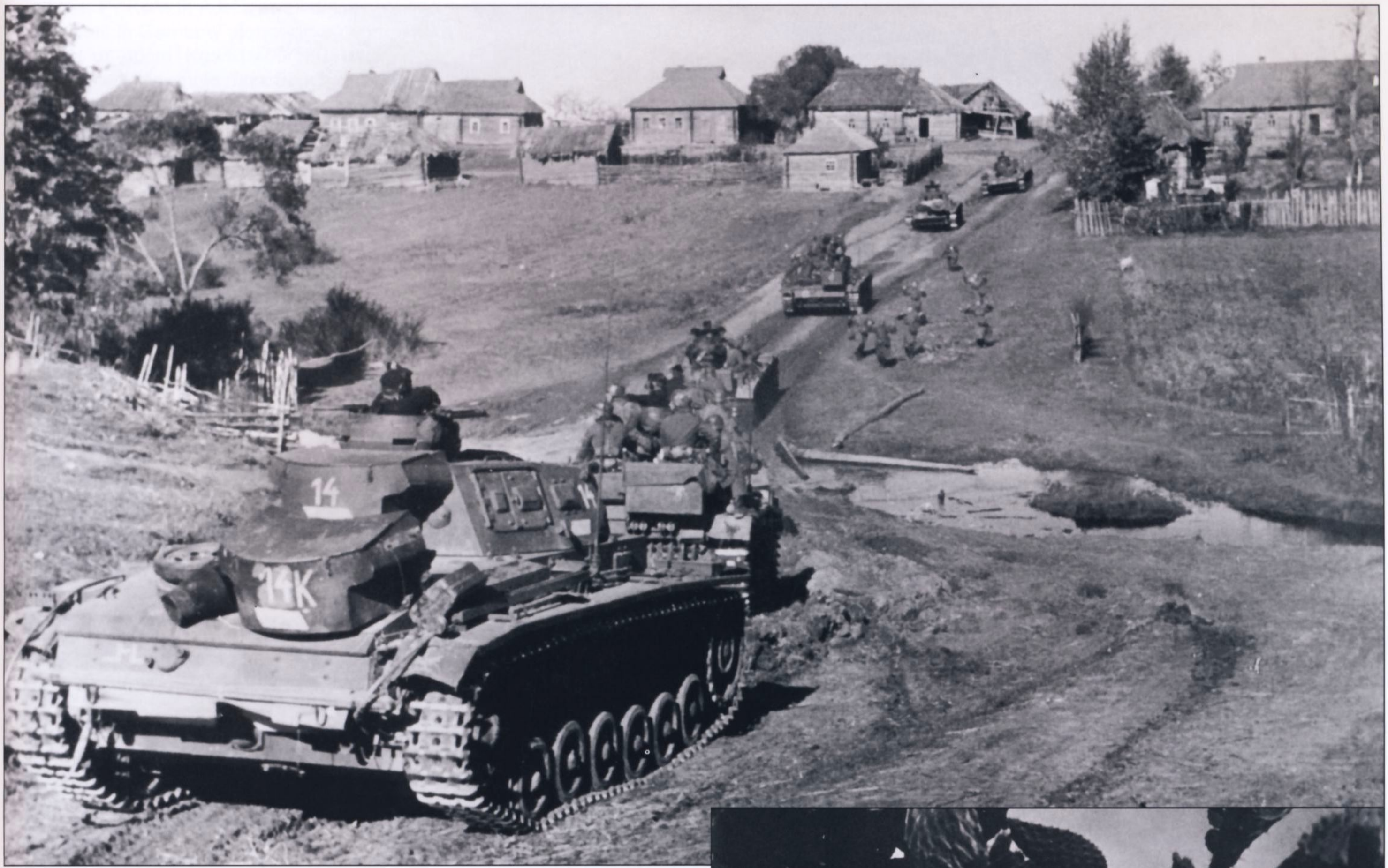
Improvements to the Pz.Kpfw.III Ausf.H included a newly designed turret with a single plate on the rear that eliminated the bulge for the cupola, the addition of 30mm thick armor plates bolted to the front and rear of the hull and welded to the front of the superstructure. The track width was increased to 40cm and the road wheels from 75mm wide to 95mm. A new cast drive sprocket and rear idler were also introduced.



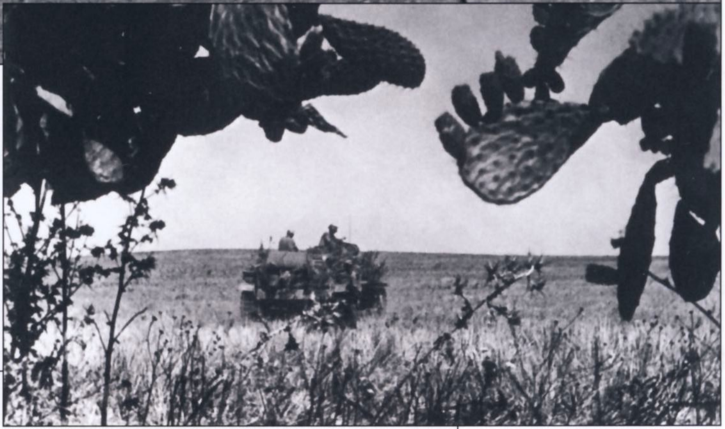
A Pz.Kpfw.II and a Pz.Kpfw.III Ausf.H assist a Czech Praga T9 artillery tractor to back a 60-ton Culemeyer trailer carrying a cast steel blockhouse on it down a beach access road.



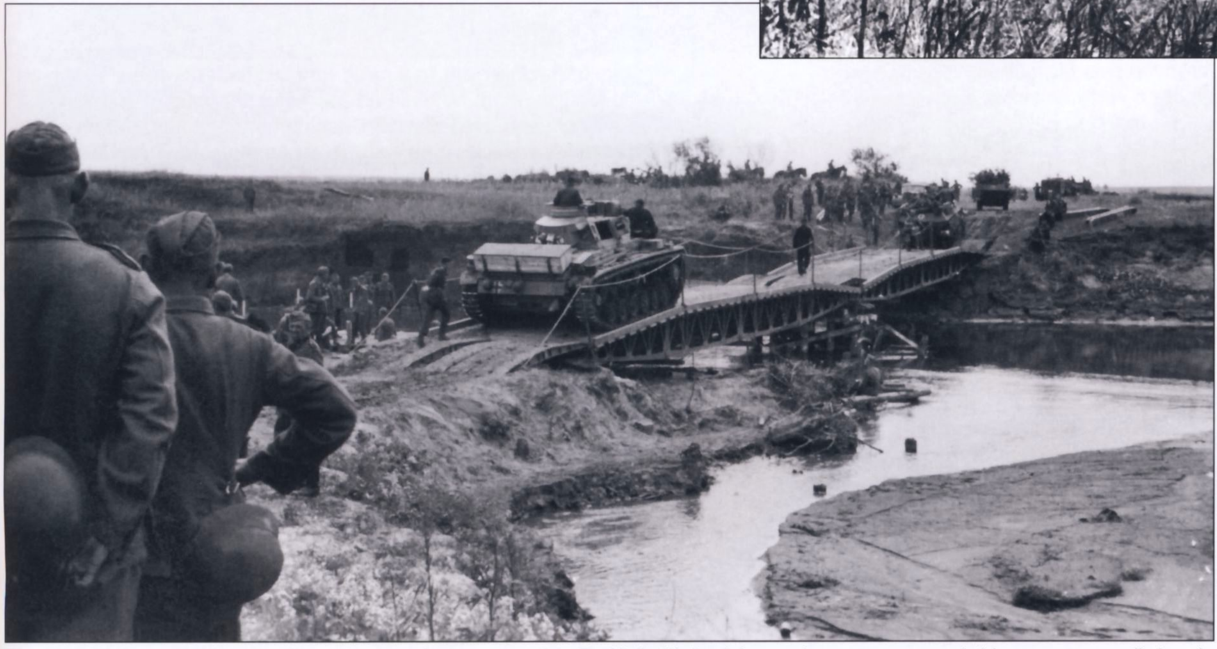
A Pz.Kpfw.III Ausf.H with a textbook application of winter whitewash camouflage paint crosses a temporary wooden bridge in Russia. The additional 30mm armor plates bolted to the lower hull can be clearly seen in this photo as well as the 30mm plate welded to the front of the superstructure. Note the original Dunkelgrau RAL 7021 paint on the underside of the 5cm gun and inside of the turret side hatches.



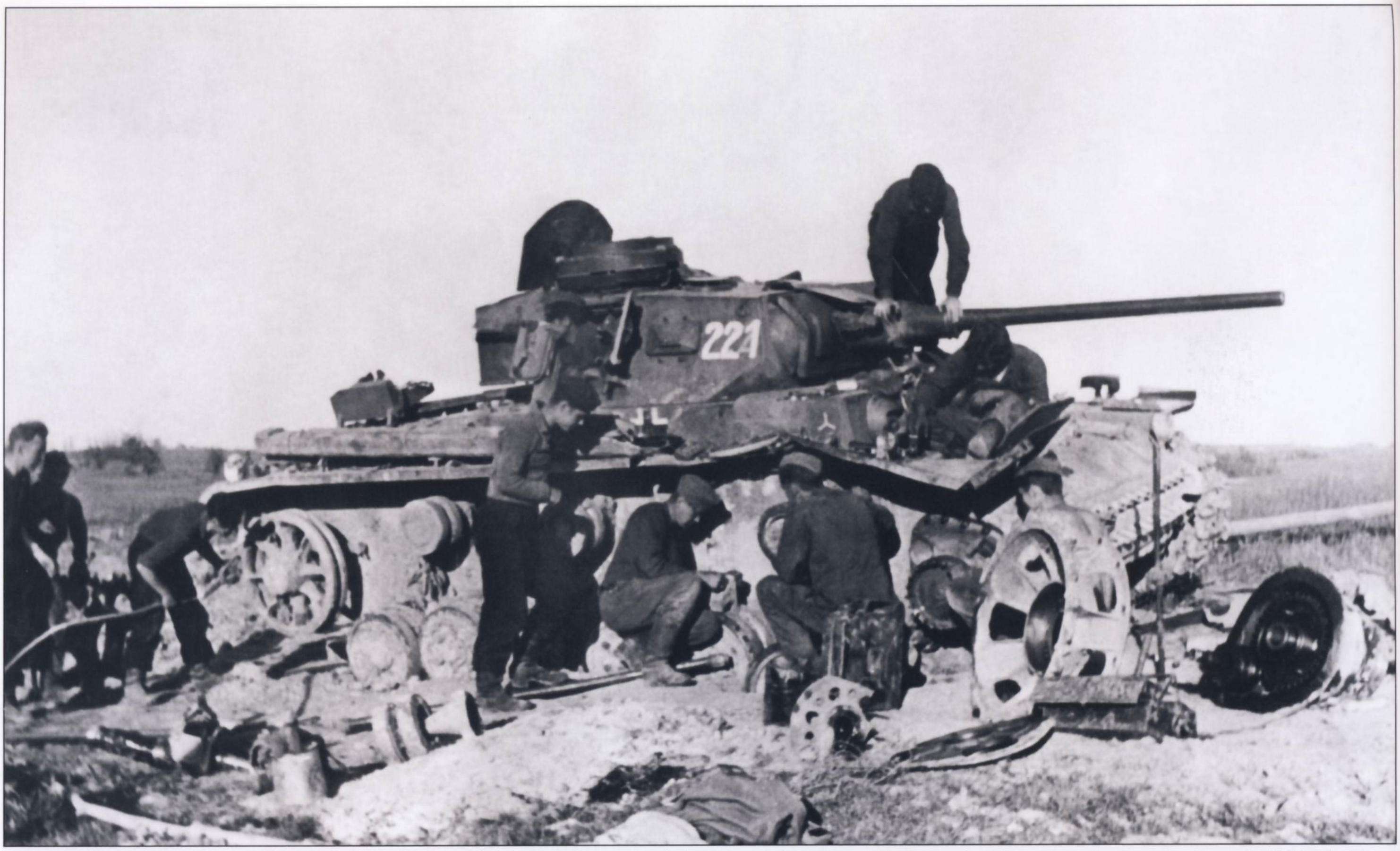
A column of Pz.Kpfw.III Ausf.J from Pz.Rgt.15 of the 11.Panzer-Division advance through a Russian village in the summer of 1941. The crew of the nearest vehicle has mounted a second stowage bin, probably recovered from a destroyed tank, on the engine deck. The tactical number '14' has been painted on both bins as well as each side of the turret over a white rhomboid. The white 'K' symbolizes Pz.Gruppe von Kleist. In August 1940, Pz.Rgt.15 was assigned to the newly formed 11.Panzer-Division and had utilized the rhomboid markings in Poland and France. There is photographic evidence that this Pz.Kpfw.III survived the summer battles and fought in the winter of 1941-42. They can be seen in Concord 7056 'Panzer Vor! 2 German Armor at War 1939-45'.



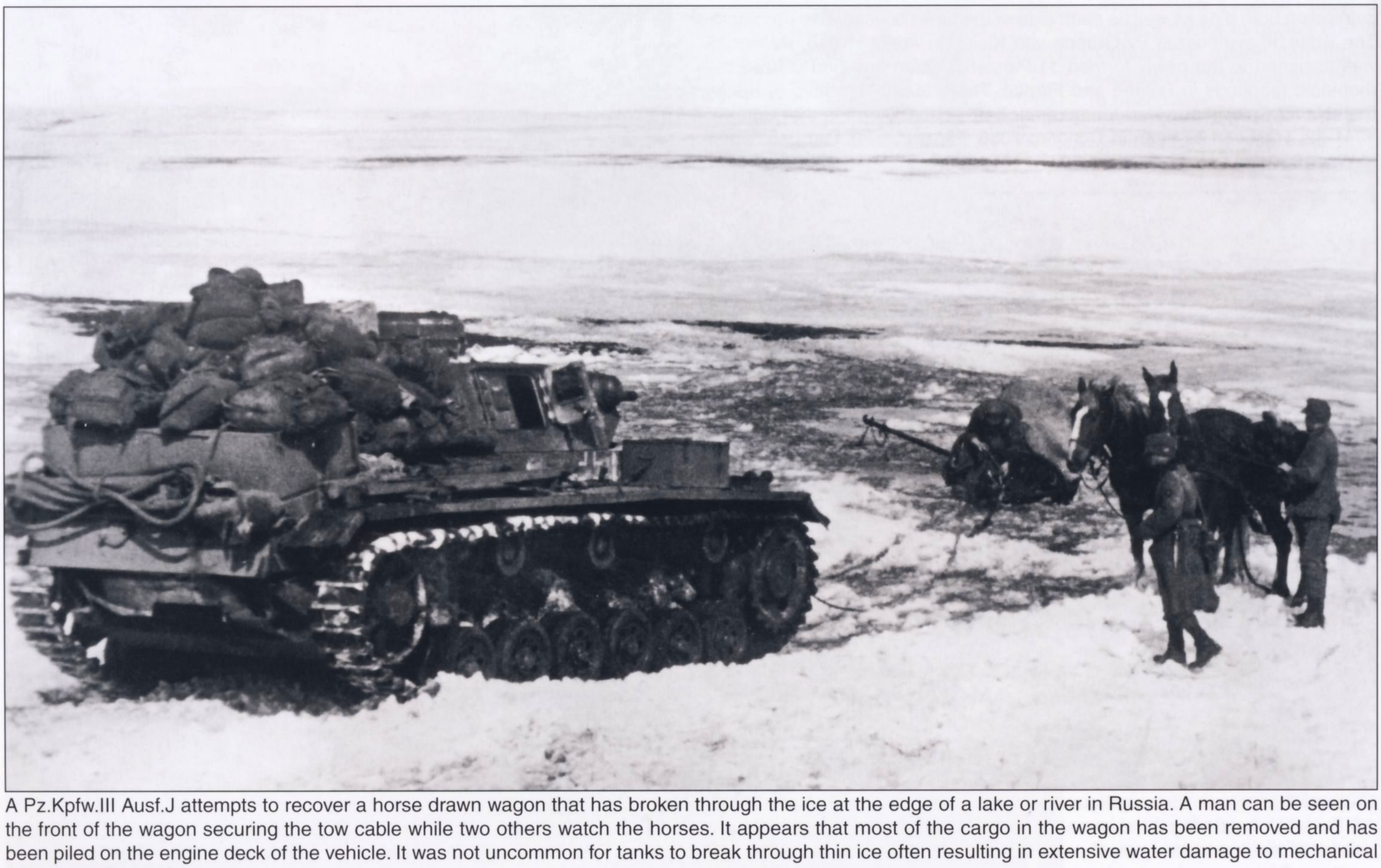
A Pz.Kpfw.III Ausf.J photographed in an arid region of southern Russia. The lower hull was redesigned to provide 50mm of armor protection to the front and rear and the hull sides were extended in front with holes drilled in them for towing, thus eliminating the cast towing pintles used on the earlier marks. A large tarp covers the crews belongings stowed on the engine deck and some cut foliage has been draped over the hull to provide camouflage.



The new 50mm rear plate configuration can be seen on this Pz.Kpfw.III Ausf.J crossing a temporary bridge over a small river in the Soviet Union during the summer of 1942. Judging from the contrast between the crew's uniforms and the vehicle, it has been painted in the two color tropical paint scheme of 2/3 Braun RAL 8020 and 1/3 Grau RAL 7027 utilized in North Africa and in southern Russia.

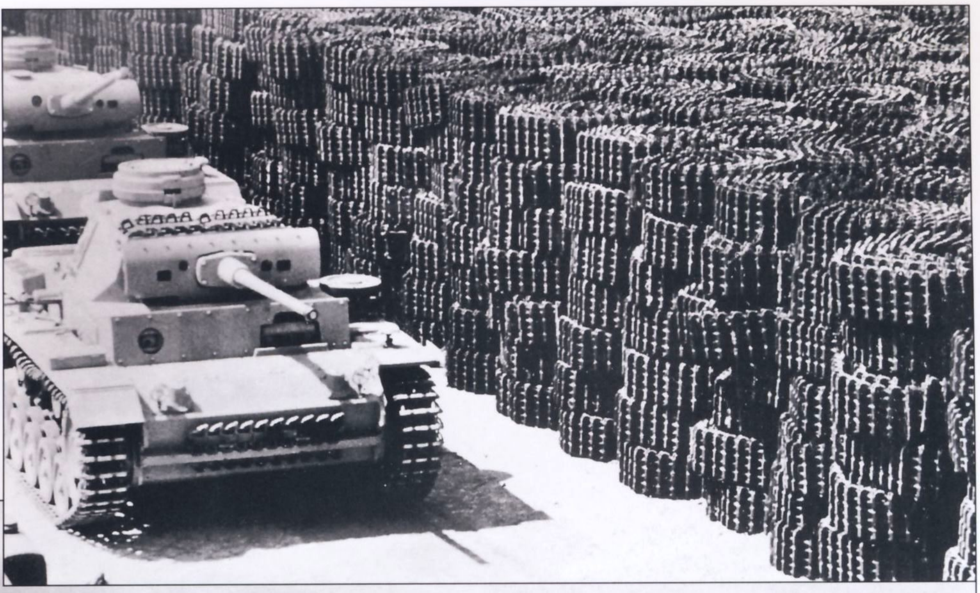


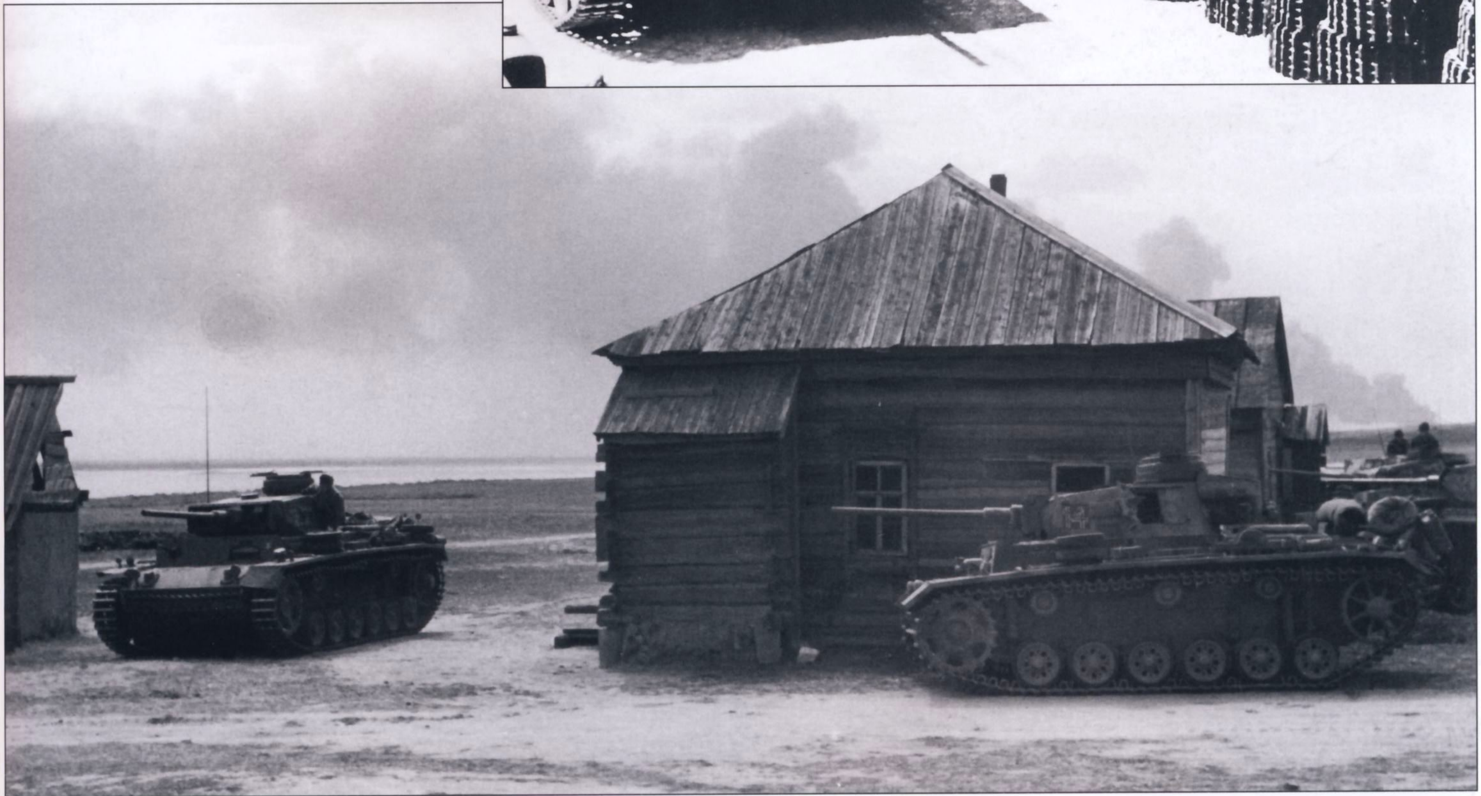
A Pz.Kpfw.III Ausf.J from Pz.Rgt.1 of the 1.Panzer-Division photographed during repairs after suffering extensive mine damage in August 1942. Markings include a white tactical number '221' that has recently been painted over an older number, possibly '224'. The tactical sign for 1.Panzer-Division, an inverted 'Y', can be seen on the side of the hull near the front as well as a white outlined black Balkenkreuz farther back. The effects of dust and mud on the Dunkelgrau RAL 7021 paint are evident here with only the upper surfaces showing the original color.



A Pz.Kpfw.III Ausf.J attempts to recover a horse drawn wagon that has broken through the ice at the edge of a lake or river in Russia. A man can be seen on the front of the wagon securing the tow cable while two others watch the horses. It appears that most of the cargo in the wagon has been removed and has been piled on the engine deck of the vehicle. It was not uncommon for tanks to break through thin ice often resulting in extensive water damage to mechanical parts and electrical systems.

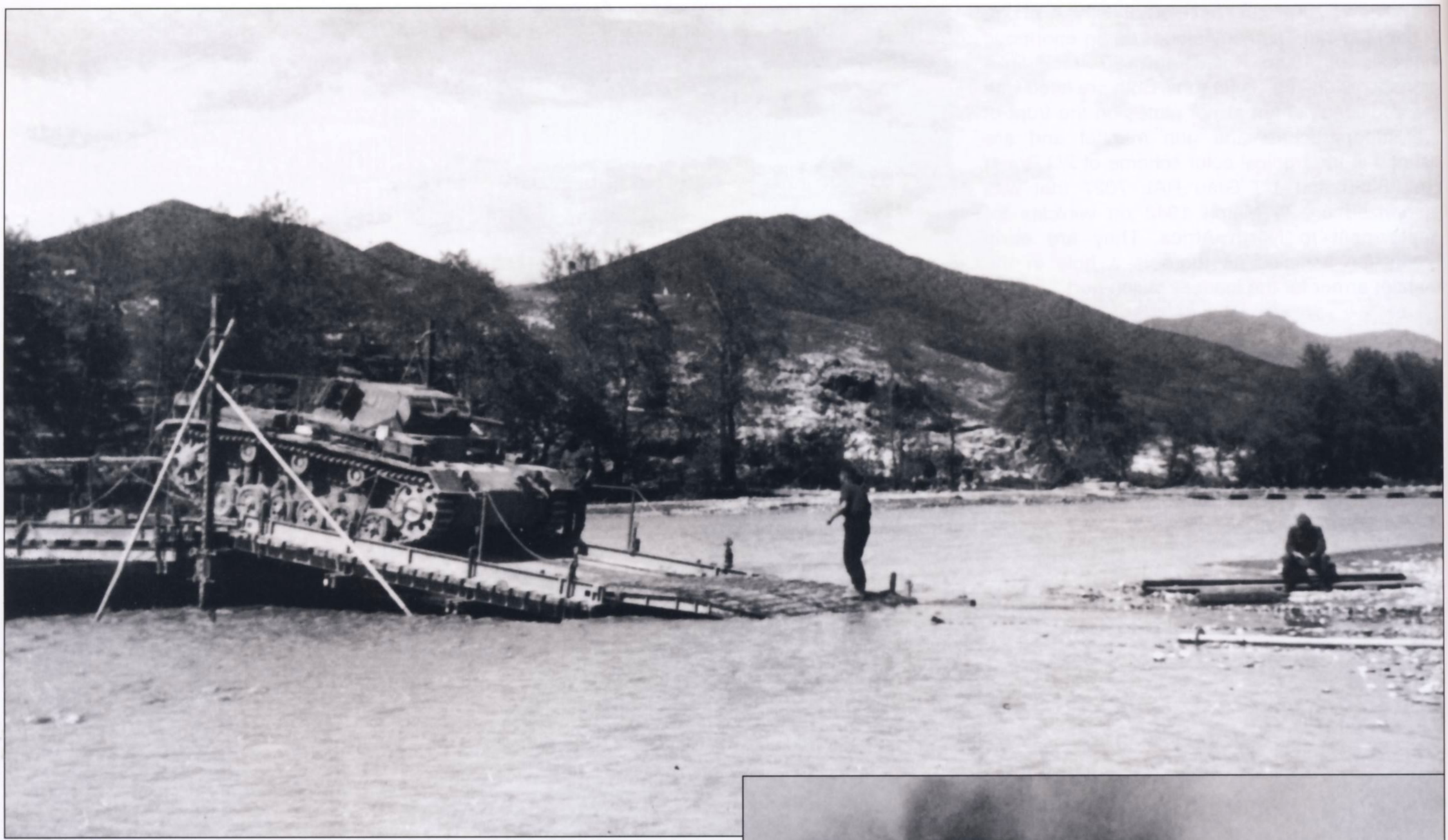
Brand new Pz.Kpfw.III Ausf.L await delivery at one of the plants in Germany alongside an enormous stockpile of 40cm Kgs.61/400/120 track links preassembled into single runs. Both are fitted with the additional 20mm armor plates on the front of the superstructure and gun mantlet and are painted in the tropical color scheme of 2/3 Braun RAL 8020 and 1/3 Grau RAL 7027 that was authorized on 25 March 1942 on vehicles for deployment to North Africa. They are early production vehicles as there is a hole in the mantlet armor for the loader's vision port.





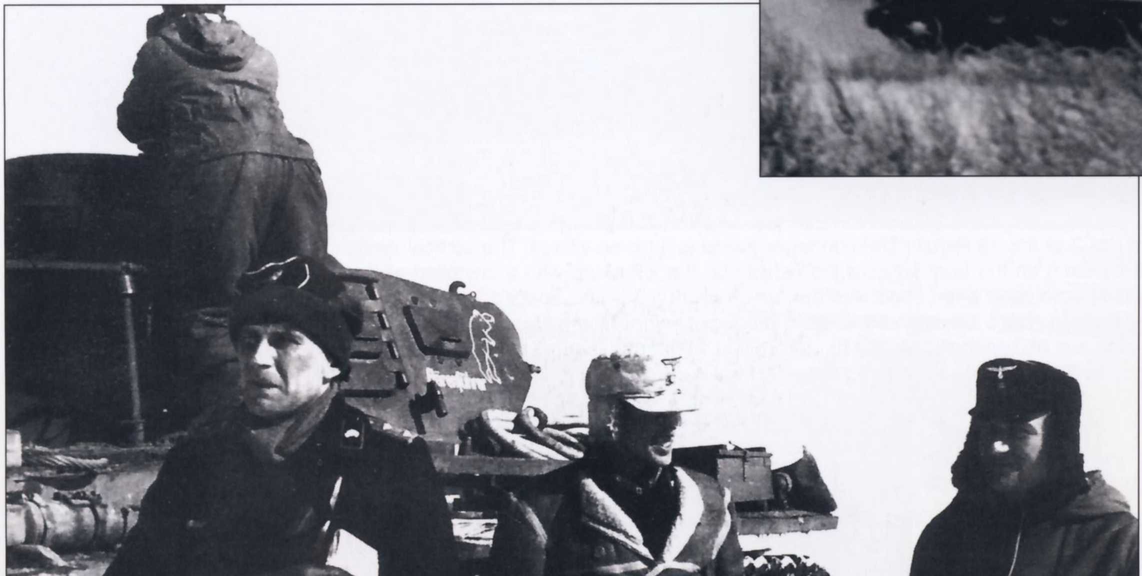
Two early Pz.Kpfw.III Ausf.L from Pz.Rgt.2 of the 16.Panzer-Division lager inside a Russian village. The tactical emblem of the division, a 'Y' with a single horizontal line through the base can be seen on the front plate of the vehicle on the left along with a stenciled white outline tactical number '22' while the vehicle on the right has the number '14'. Both have been fitted with the 5cm KwK39 L/60 gun. Spaced 20mm armor plates were added to the front of the mantlet and superstructure on the Pz.Kpfw.III Ausf.L although some were produced without the plates on the mantlet due to shortages. Changes introduced during production were deleting the side hull escape hatches and the turret side visors and loaders front visor on the mantlet. Armor protection on the front of the turret was increased from 30mm to 57mm. There were 653 produced from June to December 1942.

A Pz.Kpfw.III Ausf.L from SS-Pz.Abt.5 of SS-Division (mot) Wiking rolls through a field as smoke from burning Russian buildings fills the sky behind it. One of several units sent to the Eastern Front as reinforcements in 1941 and 1942, SS-Pz.Abt.5 arrived in June 1942 equipped with 12 Pz.Kpfw.II, 12 Pz.Kpfw.III (kz), 24 Pz.Kpfw.III (lg) 4 Pz.Kpfw.IV (kz) and 1 Pz.Bef.Wg. The divisional emblem, a rounded swastika, can be seen beside the driver's visor.

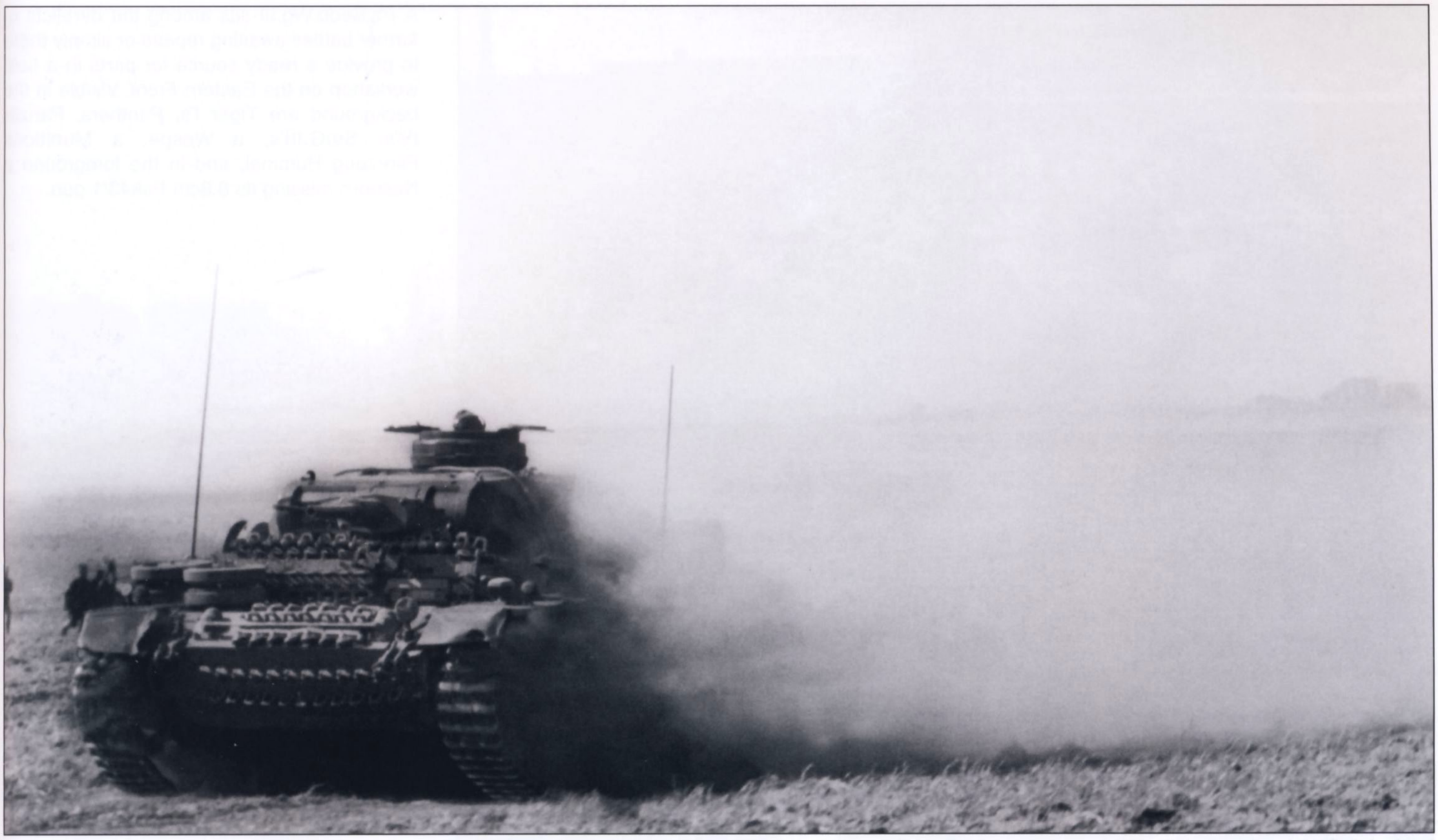


A Pz.Bef.Wg.III Ausf.E, identifiable by the Kugelblende 30 MG mount on the front of the superstructure, after safely crossing a pontoon bridge erected by German Pioniere over a river in Russia. It has been fitted with a dummy 3.7cm gun and also has the large frame antenna mounted on the engine deck. The tactical number 'I01' can be seen painted in white on the side of the turret.

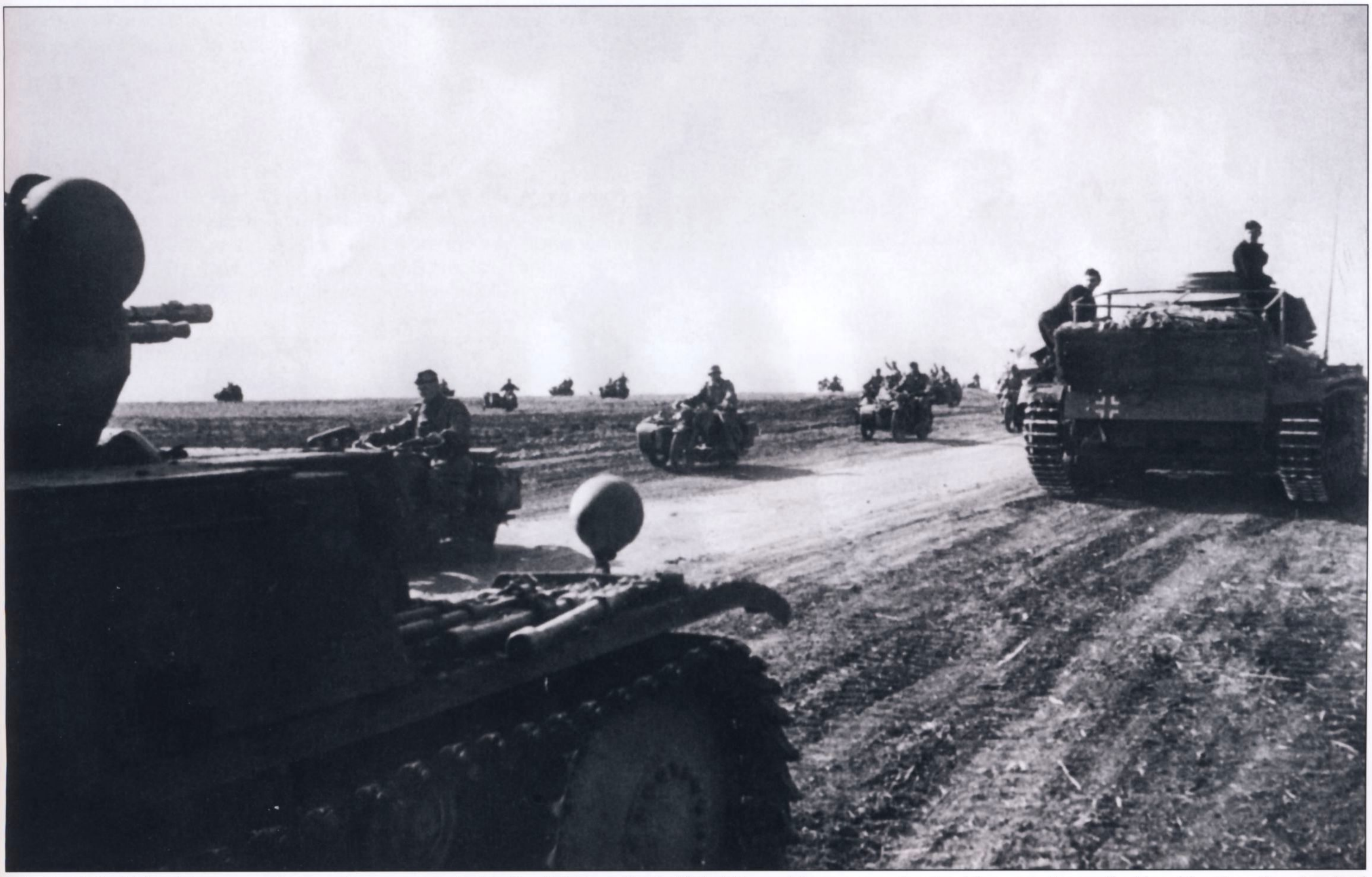
This Pz.Bef.Wg.III Ausf.H can be identified by the new turret design with the one piece back. It is fitted with a dummy 5cm gun and the large frame antenna on the engine deck that would be later replaced with the less conspicuous Sternantenne. Unfortunately, the marking on the turret is indistinguishable at this distance. A total of 175 vehicles were produced from November 1940 to January 1942.



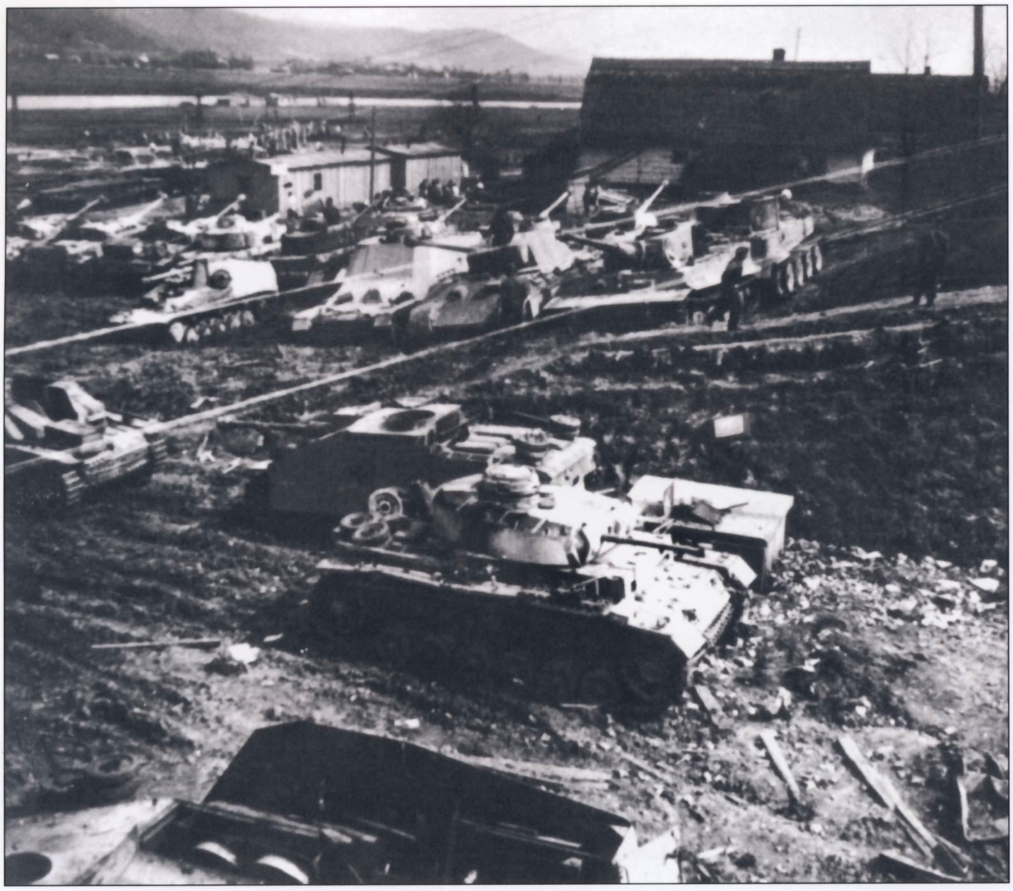
This Pz.Bef.Wg.III Ausf.H, identifiable by the reinforced cupola, is unusual in that it is fitted with a standard cast drive sprocket instead of the early eight-hole drive sprocket normally seen on these vehicles. It is likely that this was simply a replacement for a damaged sprocket. The 'Berlin Bear' emblem of Pz.Rgt.35 from the 4.Panzer-Division can be seen on the side of the turret in white outline along with the name 'Bärenführer'. The Hauptmann in the foreground is wearing the Ostfrontmedaille ribbon in the lapel of his tunic that was awarded to all personnel who served on the Eastern Front between 15 November 1941 and 15 April 1942 indicating that this photo must have been taken the following winter.



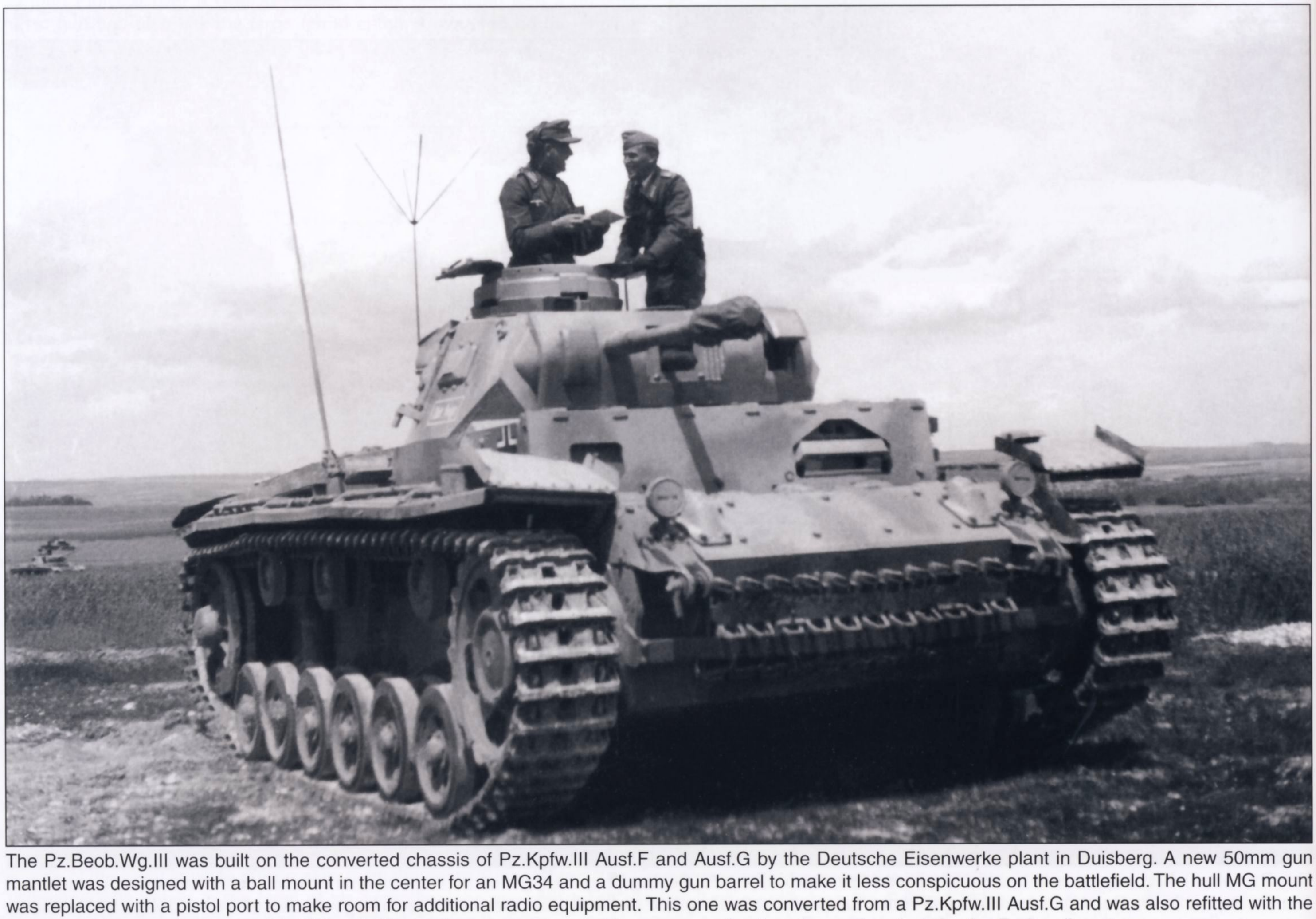
A Pz.Bef.Wg.III Ausf.H from Pz.Rgt.24 of the 24.Panzer-Division raises a cloud of dust on the southern Russian steppe during the summer of 1942. It is fitted with a dummy 5cm gun and even through the dust cloud it can be seen that the frame antenna normally mounted on the engine deck is missing. The leaping horseman insignia of 24.Panzer-Division can be seen on the right mudguard.



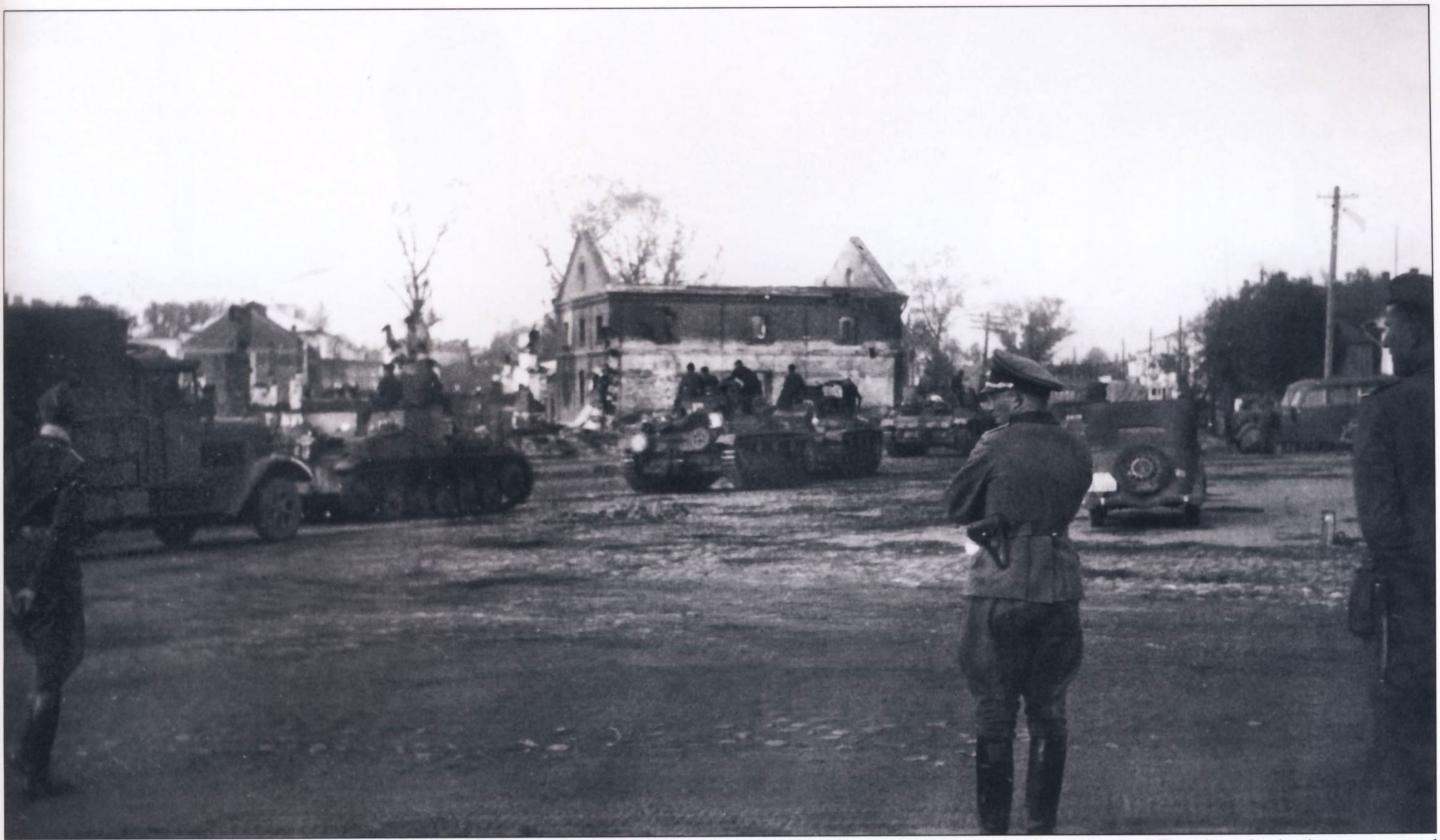
This Pz.Kpfw.III Ausf.J appears to have been converted in the field to a Pz.Bef.Wg.III by adding a non-standard frame antenna that is wider than the standard one. On the earlier Pz.Bef.Wg.III Ausf.D, E and H, the turret was bolted in place and so it was common to see a large amount of crew stowage on the engine deck as is evident here. Although the turret on this vehicle is probably traversable, the frame antenna would prevent any movement.



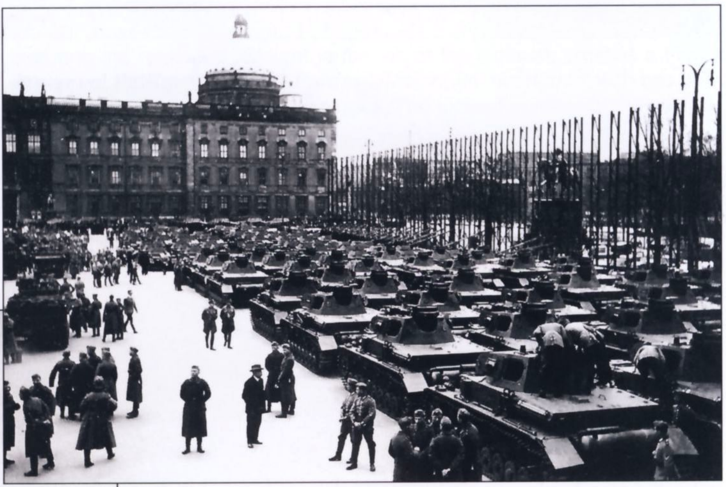
A Pz.Beob.Wg.III sits among the derelicts of former battles awaiting repairs or simply there to provide a ready source for parts in a field workshop on the Eastern Front. Visible in the background are Tiger I's, Panthers, Panzer IV's, StuG.III's, a Wespe, a Munitions Fahrzeug Hummel, and in the foreground a Nashorn missing its 8.8cm Pak43/1 gun.



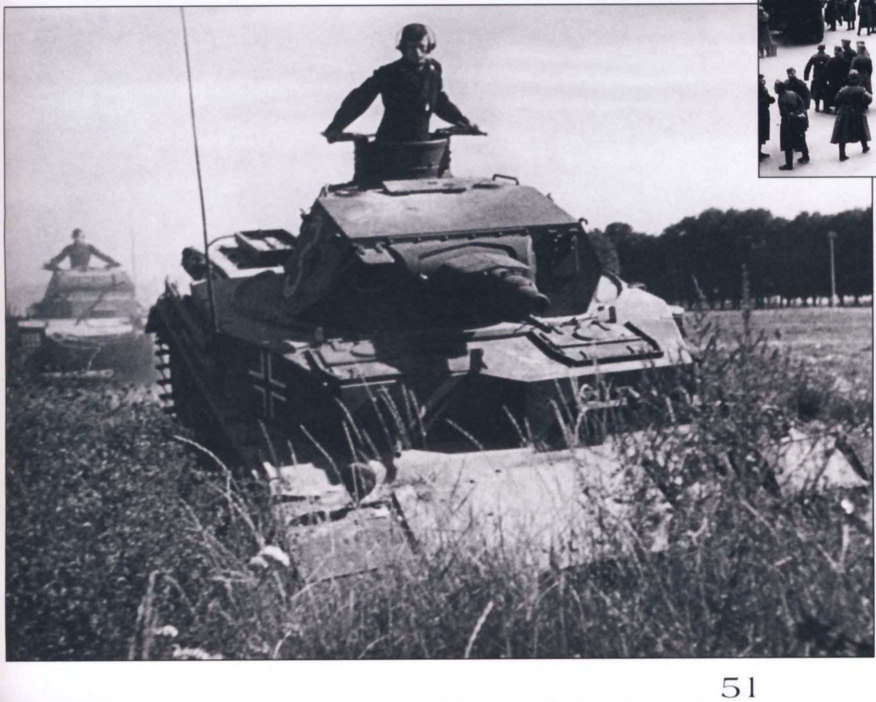
The Pz.Beob.Wg.III was built on the converted chassis of Pz.Kpfw.III Ausf.F and Ausf.G by the Deutsche Eisenwerke plant in Duisberg. A new 50mm gun mantlet was designed with a ball mount in the center for an MG34 and a dummy gun barrel to make it less conspicuous on the battlefield. The hull MG mount was replaced with a pistol port to make room for additional radio equipment. This one was converted from a Pz.Kpfw.III Ausf.G and was also refitted with the new cast drive sprocket and welded idler. A Sternantenne was mounted in an armored pot on the engine deck for the Fu.8 radio set.



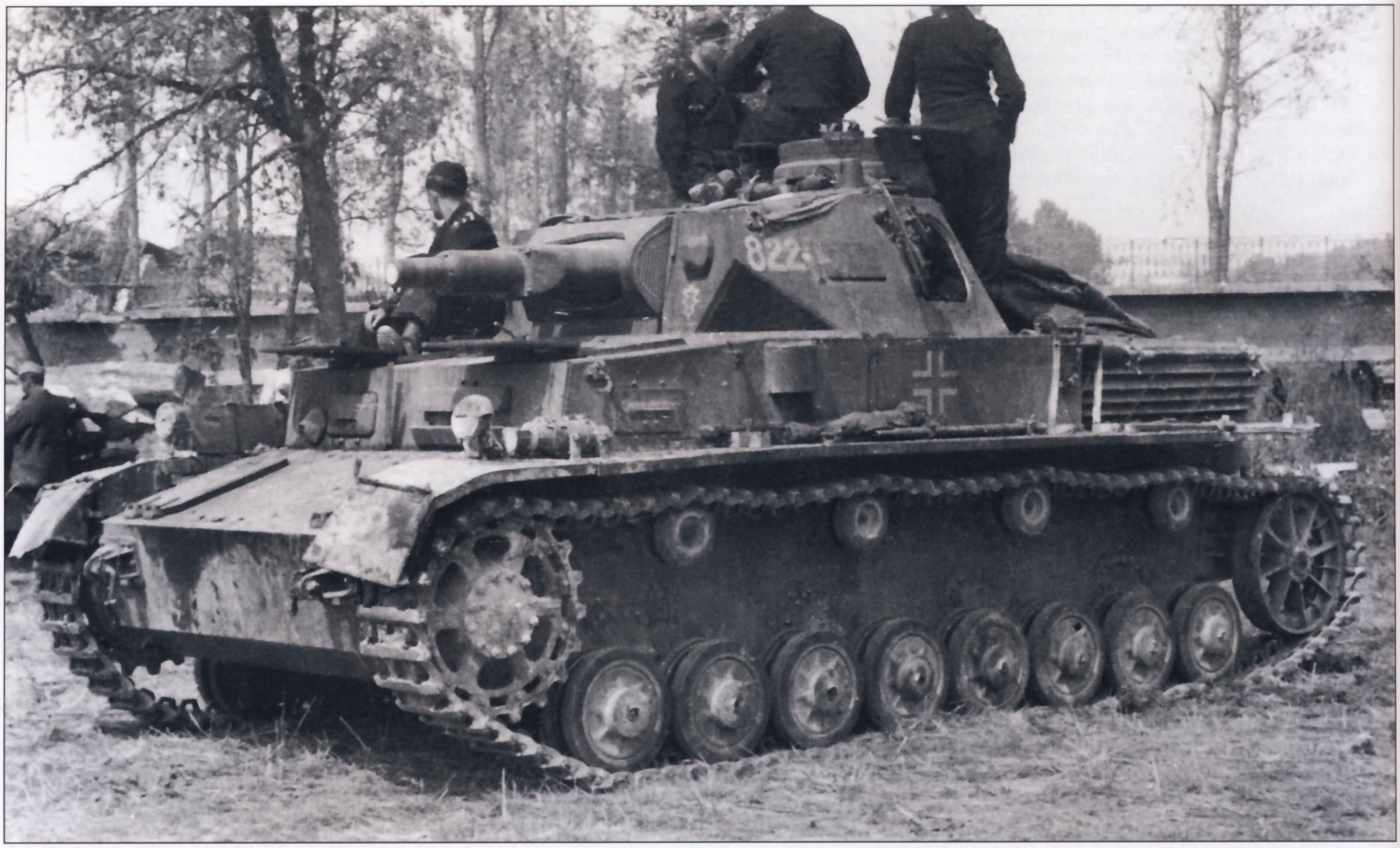
Several Pz.Kpfw.III converted to Tauchpanzer from Pz.Rgt.18 of the 18.Panzer-Division advance through a battle damaged Russian city in the summer of 1941. After the defeat of France in May 1940, a deep wading submersion system was developed for the Pz.Kpfw.III for the anticipated invasion of England. All air intakes were fitted with watertight covers and joints were sealed with rubber gaskets. Air was supplied to the submerged vehicle by a long flexible tube called a snorkel that had a float on the end to keep it above the surface of the water. When it was realized that the invasion would not take place, most of the Tauchpanzer III were modified to allow them to cross rivers using a snorkel fixed to the cupola. A total of 168 Pz.Kpfw.III Ausf.F, G and H were converted to Tauchpanzer from July to October 1940.



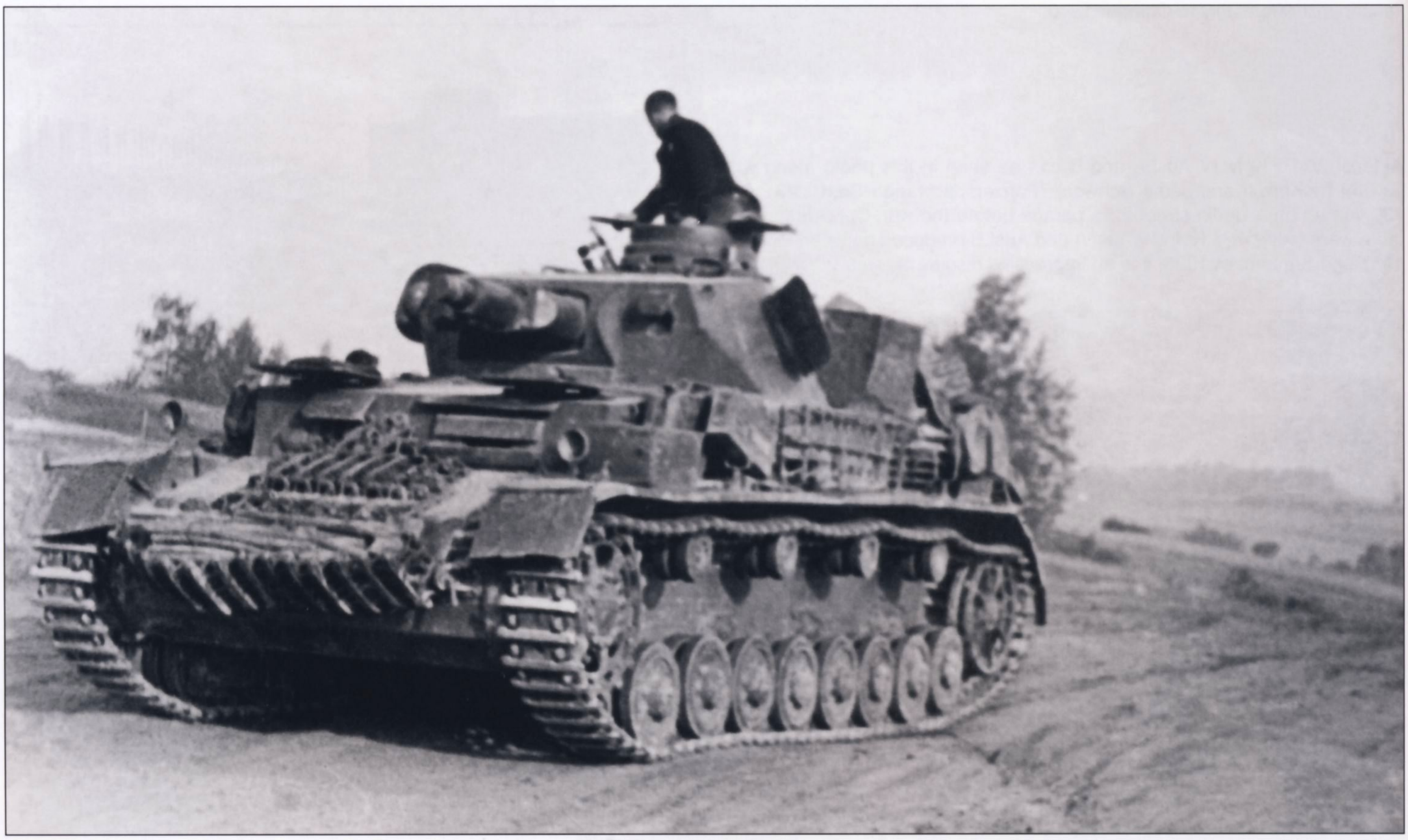
At least 36 Pz.Kpfw.IV Ausf.A and B can be seen in this photo along with several Pz.Kpfw.II and some Schwerer Panzerspähwagen Sd.Kfz.231 and 232 line up on a Berlin street for a parade before the war. Considering that there were only 77 Pz.Kpfw.IV Ausf.A and Ausf.B produced between October 1937 and September 1938, it is an impressive display of force.



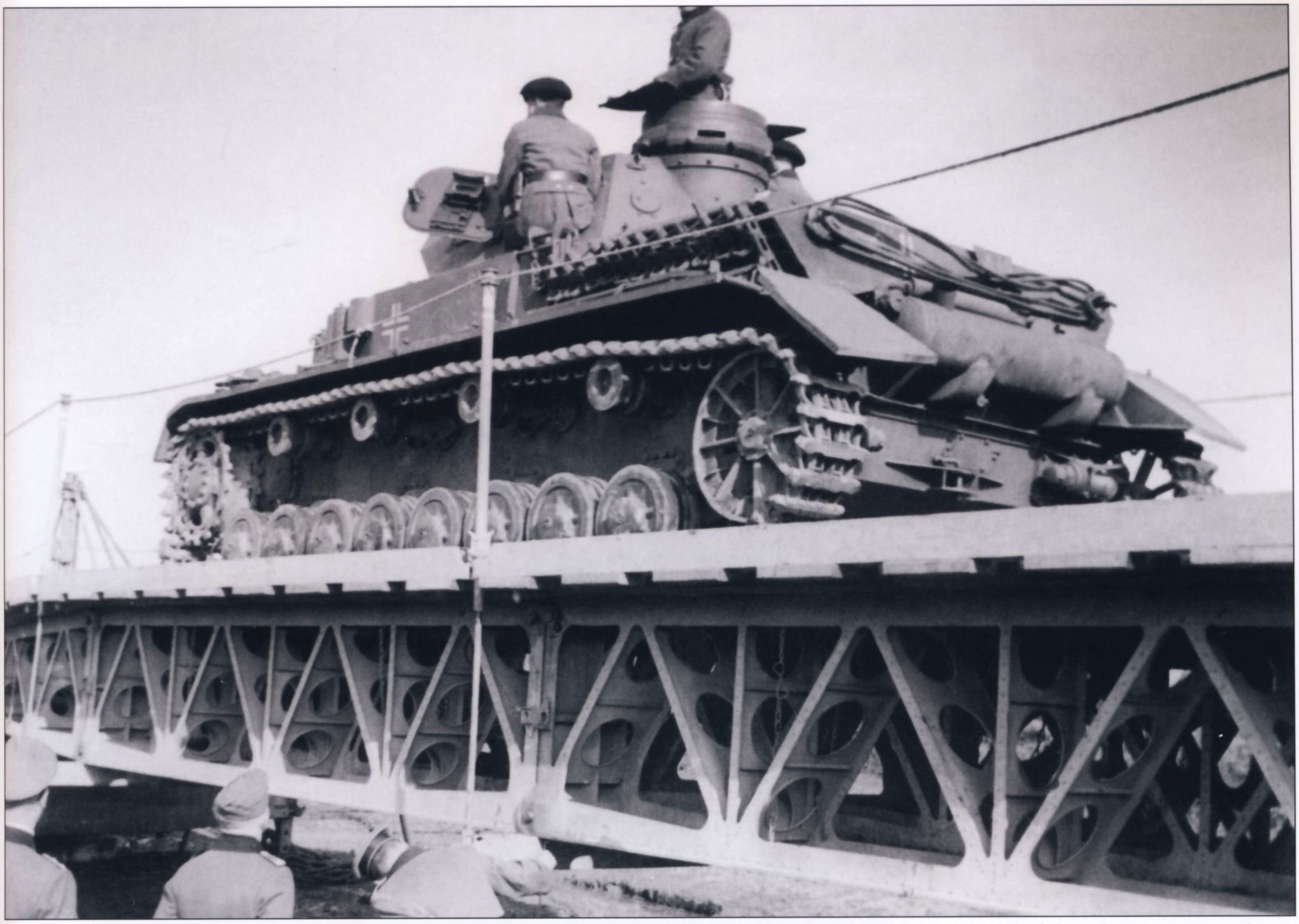
A Pz.Kpfw.IV Ausf.A negotiates a shallow ditch during the fighting in France in 1940. As can be seen here, the superstructure was wider than subsequent designs and was stepped back in front of the radio operator. A split hatch opening fore and aft was installed in the superstructure roof for both the driver and radio operator. Armament consisted of a 7.5cm KwK37 L/24 gun with a coaxial MG34 and an MG34 mounted in a ball mount in front of the radio operator. A drum shaped cupola with eight vision ports was provided for the commander and a swing arm used to mount an MG34 for use against ground attack aircraft, was mounted on the left side of the superstructure. A total of 35 vehicles were produced from November 1937 to March 1938.



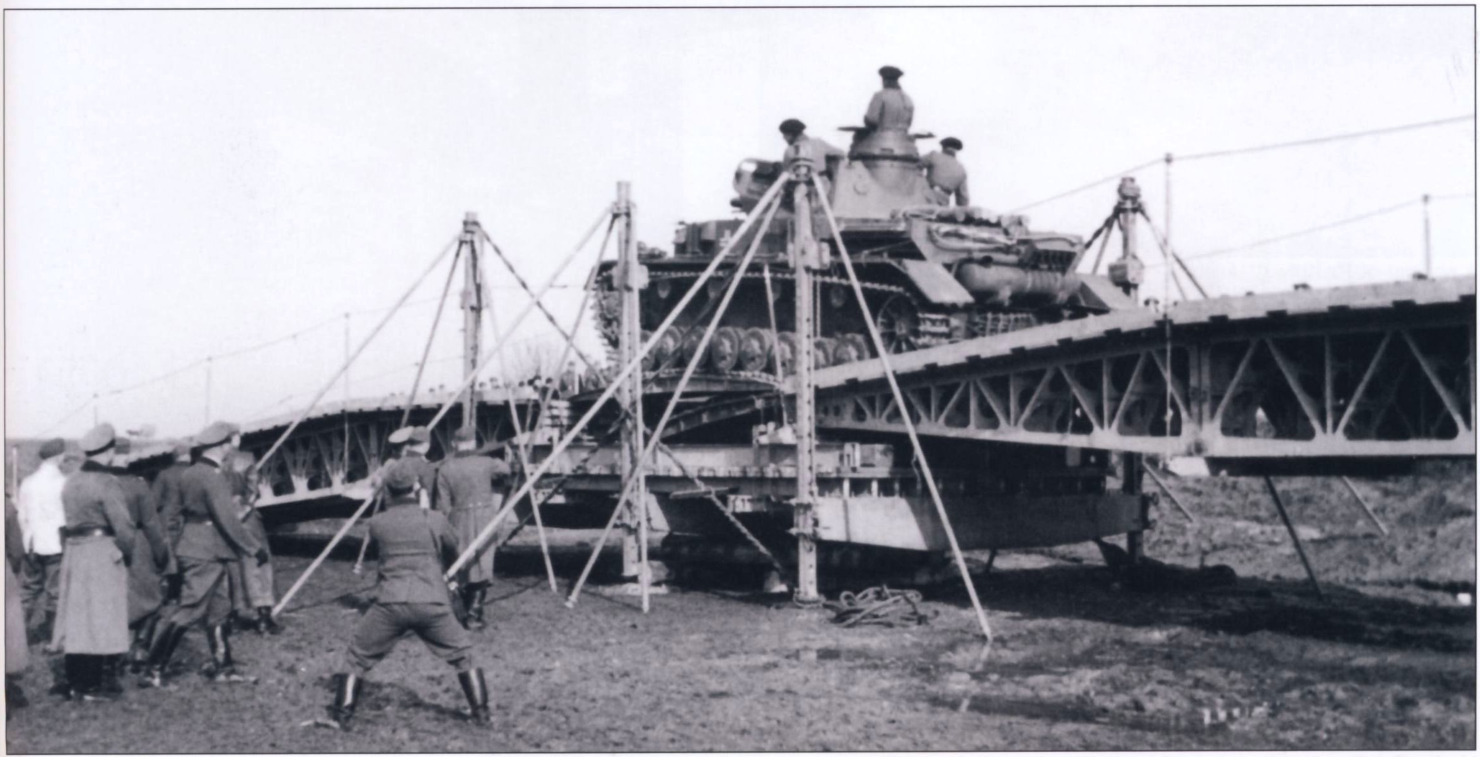
This Pz.Kpfw.IV Ausf.B or C has the oak leaf emblem of 1.Panzer-Division painted on the front of the turret. The tactical number, a white '822' followed by a white dot further identifies it as belonging to II.Abteilung of Pz.Rgt.2. Pz.Rgt.2 was equipped with 20 Pz.Kpfw.IV in May 1940 during the battle for France.



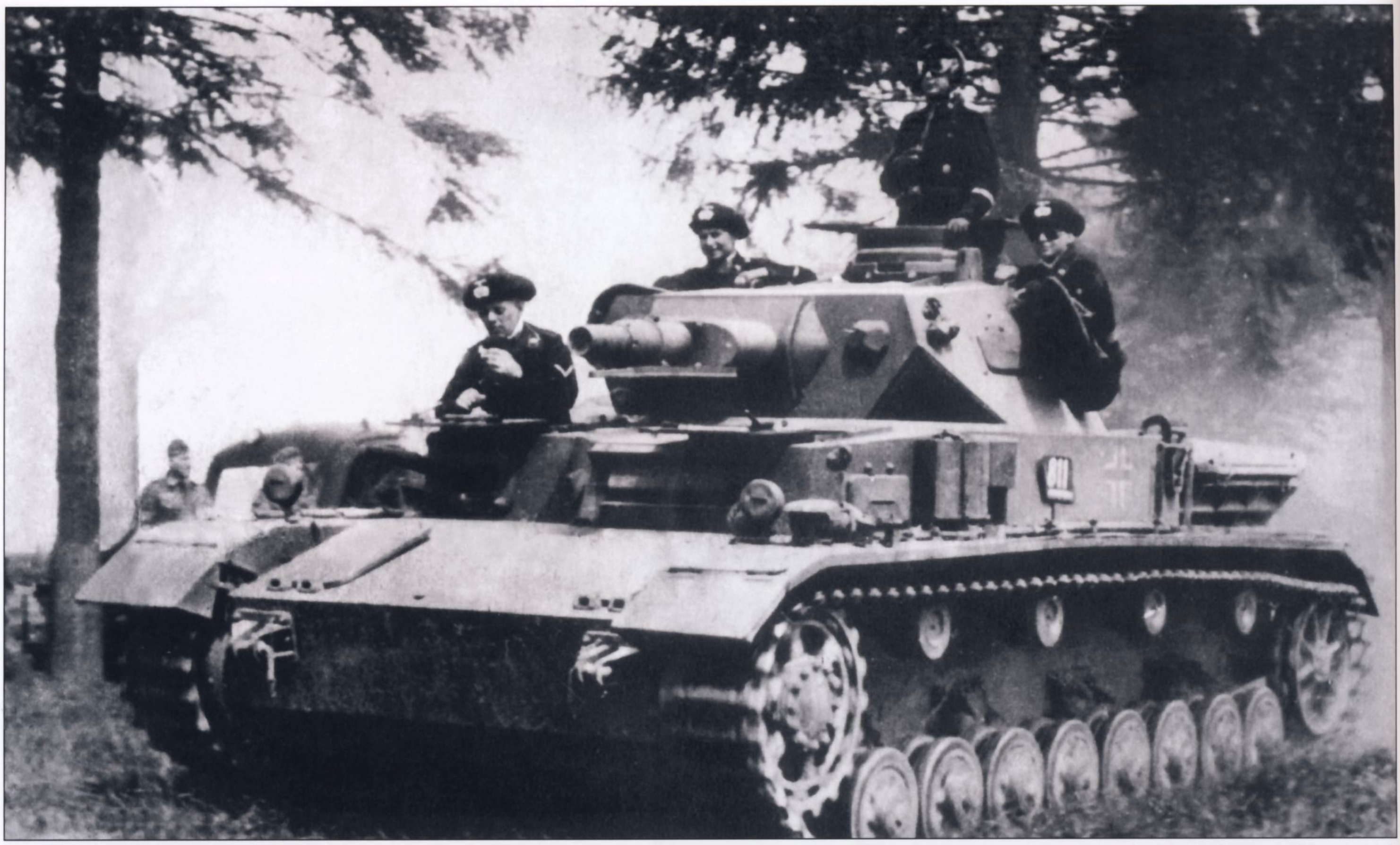
This Pz.Kpfw.IV Ausf.B or Ausf.C was likely photographed in Russia in 1941 judging by the amount of stowage being carried. The Pz.Kpfw.IV Ausf.B was externally almost identical to the Ausf.C. Minor differences can be seen in the shape of the opening for the 7.5cm gun in the mantlet and a long armored sleeve for the coaxial MG34 was added on the Ausf.C. Round engine deck locks were utilized on the Ausf.B instead of the rectangular style that would continue to be used throughout the rest of Pz.Kpfw.IV production.



A Pz.Kpfw.IV Ausf.C, identifiable by the sharp angles on either end of the rear plate and the relocated tail light to the left of the exhaust, crosses a heavy temporary bridge during a training exercise in the spring of 1940. The divisional emblem of Pz.Rgt.11 of the 6.Panzer-Division, an inverted 'Y' with two dots beside it can be seen painted in yellow on the hull side and on the rear plate to the left of the white outline Balkenkreuz. The tactical number of the vehicle, 413' is painted in yellow on a black rhomboid plate visible above the tow cable.



A Pz.Kpfw.IV Ausf.D, also from Pz.Rgt.11 of the 6.Panzer-Division, crosses the same bridge. The tactical number '421' can be seen painted on the rhomboid plate on the rear. The fact that this is a training exercise is obvious from the number of senior officers and the photographer present to the left.

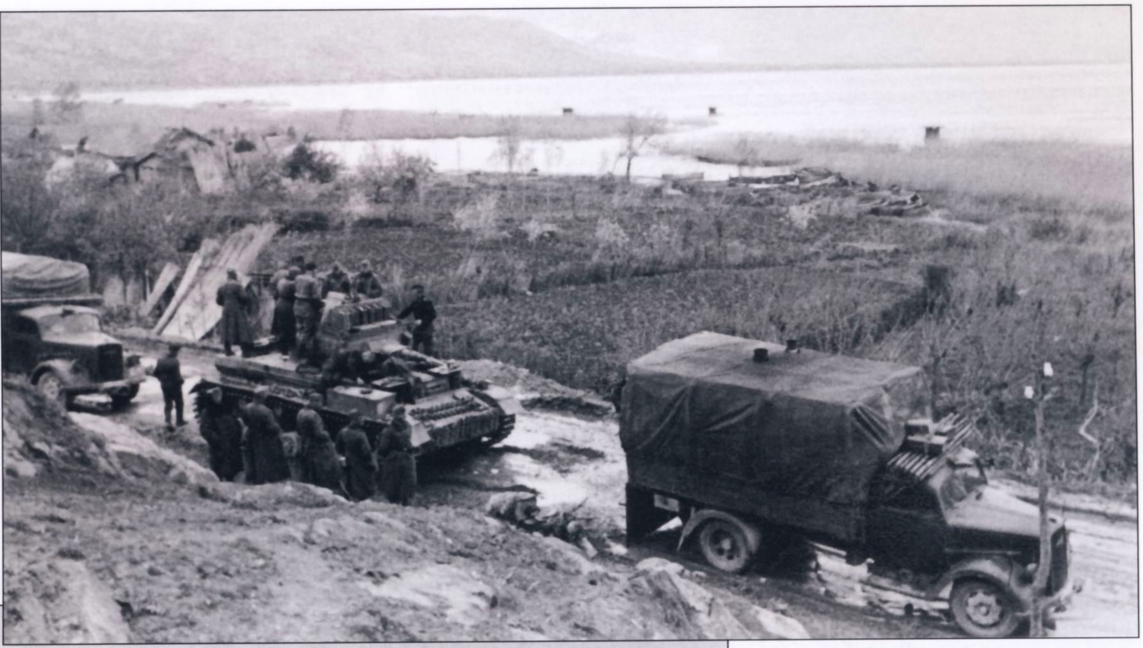


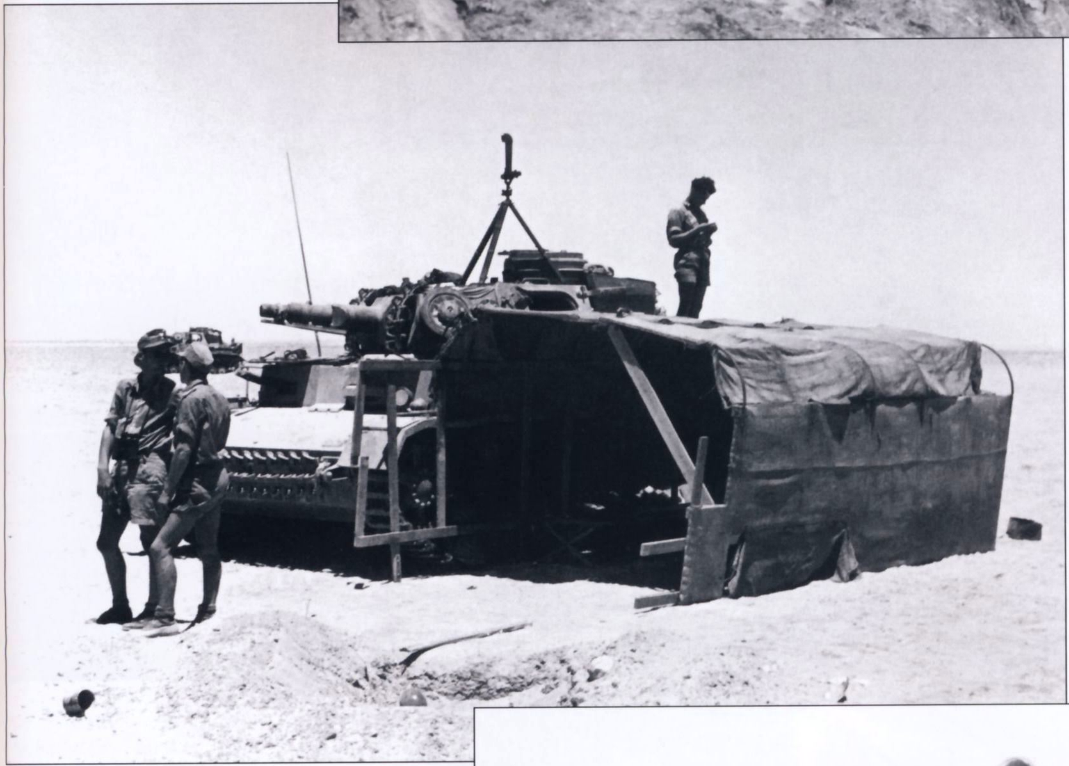
The stepped front plate was reintroduced on the Pz.Kpfw.IV Ausf.D along with an improved MG ball mount, the Kugelblende 30, and a new 35mm thick external mantlet was added. The ventilation grilles on the sides of the engine deck were redesigned. Five bump stops were installed on each side and the height of the guide tooth on the tracks was increased. The tactical number '811' is painted in white on a black rhomboid plate on the side of the hull with a white line below, possibly indicating that the vehicle is from II./Pz.Rgt.1 of the 1.Panzer-Division. A total of 229 vehicles were produced from October 1939 to May 1941.

A column of Pz.Kpfw.IV Ausf.D has stopped along the side of a country road during their advance into France in 1940. Unfortunately, the photo is not clear enough to make out any markings on the vehicles that would give a clue as to the location. It appears that the second vehicle in the column has a German national flag draped over the engine deck as an aerial recognition sign.

Two Pz.Kpfw.IV Ausf.D roll through a French town. The photo was probably taken after the fighting had ceased as some of the crew are riding outside the vehicle enjoying the sunshine and fresh air.

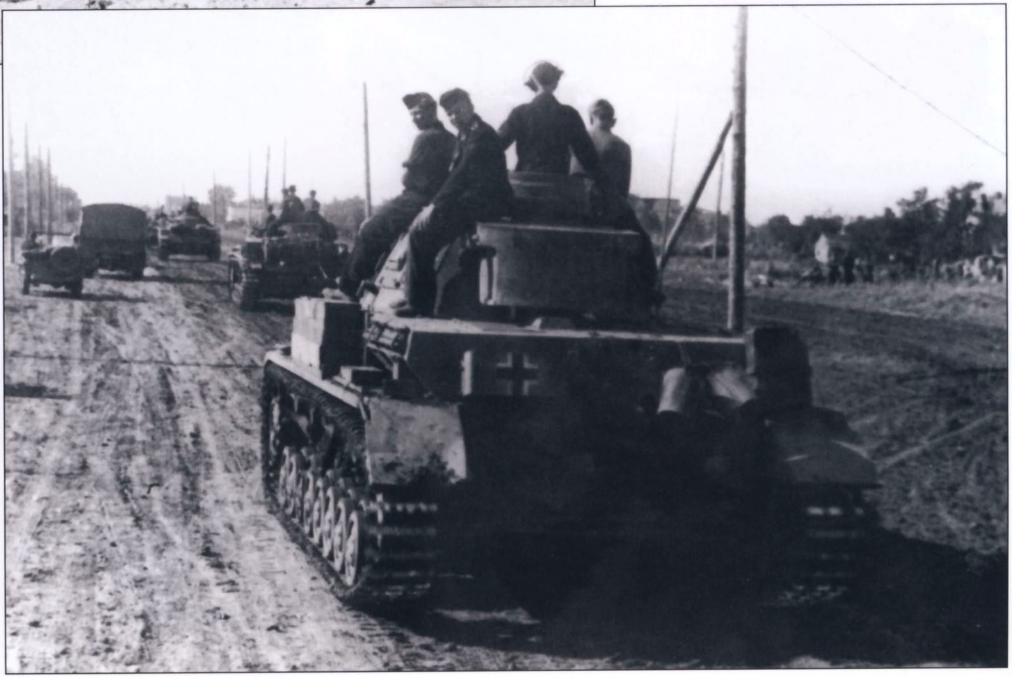
A Pz.Kpfw.IV Ausf.D and two Opel Blitz 3-ton transports stop along a muddy dirt track at the edge of a large lake while an officers group confer with the tank commander. A rack holding six jerrycans is mounted on the turret roof and a large wooden stowage box has been mounted on the right fender. On the engine deck, a pair of spare road wheels can also be seen. The photo was likely taken in the fall of 1941 in Russia.

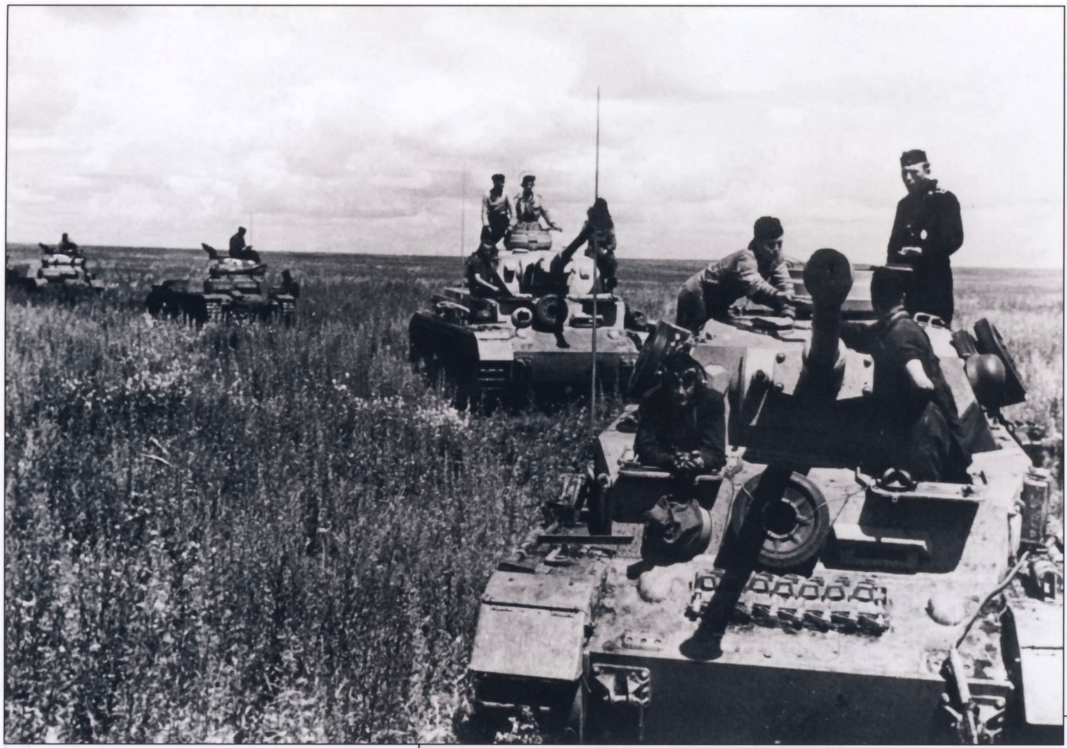




Improvements made to the Pz.Kpfw.IV Ausf.E include increasing the thickness of the front hull to 50mm, adding the 30mm armor plates to the front of the superstructure and 20mm plates to the sides of the hull and superstructure, although some vehicles left the factory without them due to shortages. The pivoting driver's visor from the Pz.Kpfw.III Ausf.G was fitted to the 30mm thick front plate. A new cast drive sprocket was introduced along with redesigned road wheel hubcaps. Some vehicles were converted for employment in North Africa by adding ventilated engine deck hatches. This Pz.Kpfw.IV Ausf.E is from Pz.Rgt.8 of the 15.Panzer-Division in North Africa. The canvas tent beside it is one of the covers that the British used to disguise their tanks from the air as transport trucks. There were 223 vehicles produced from September 1940 to April 1941.

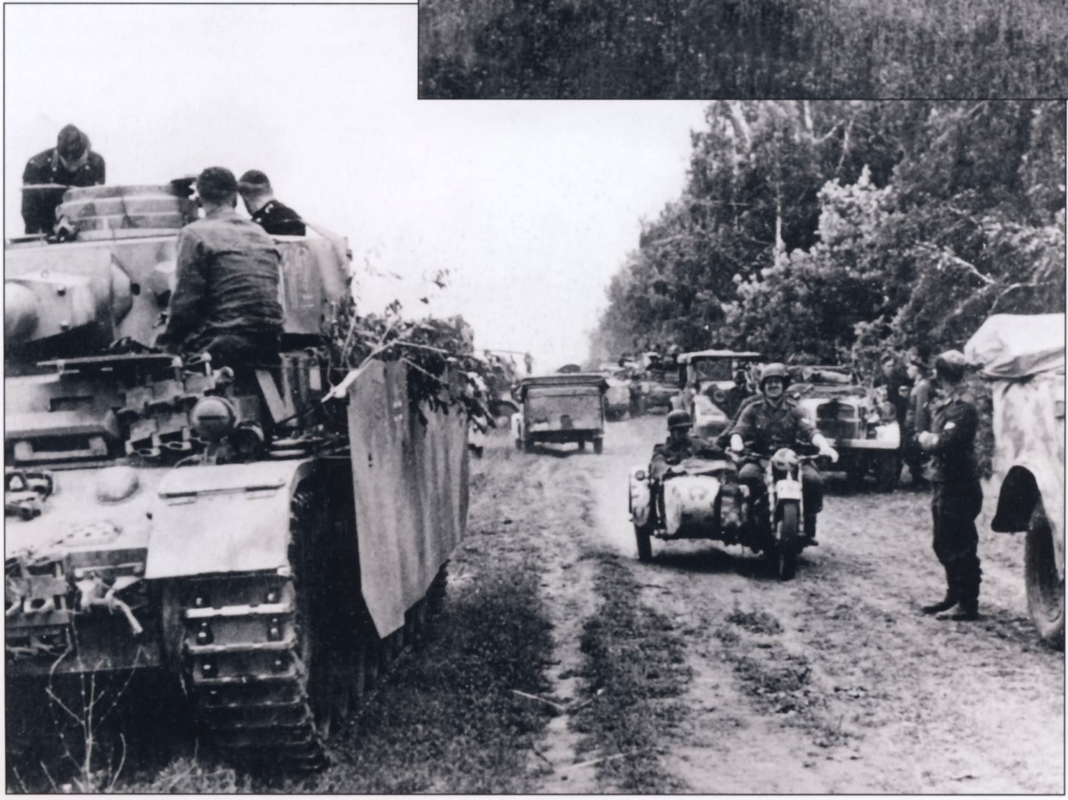
A Pz.Kpfw.IV Ausf.F in Russia in 1942. Several changes were introduced on the Pz.Kpfw.IV Ausf.F including changing the front superstructure plate to a straight 50mm plate, the front of the turret to 50mm thick, and the sides of the hull and superstructure to 30mm. A new driver's visor, the Fahrersehklappe 50 replaced the Fahrersehklappe 30 and the split turret side hatches used on the Pz.Kpfw.III were added. New 40cm tracks were introduced along with a redesigned drive sprocket and welded tubular steel idler and wider rubber tired road wheels. The muffler was shortened, a new turret traverse motor muffler designed and the smoke candle rack mounted directly to the left rear plate. Early vehicles had flat engine deck plates and some were fitted with tropical engine deck hatches for use in North Africa. Late vehicles, like this one, had new ventilated engine deck hatches with the grilles that would be used for the remainder of production.



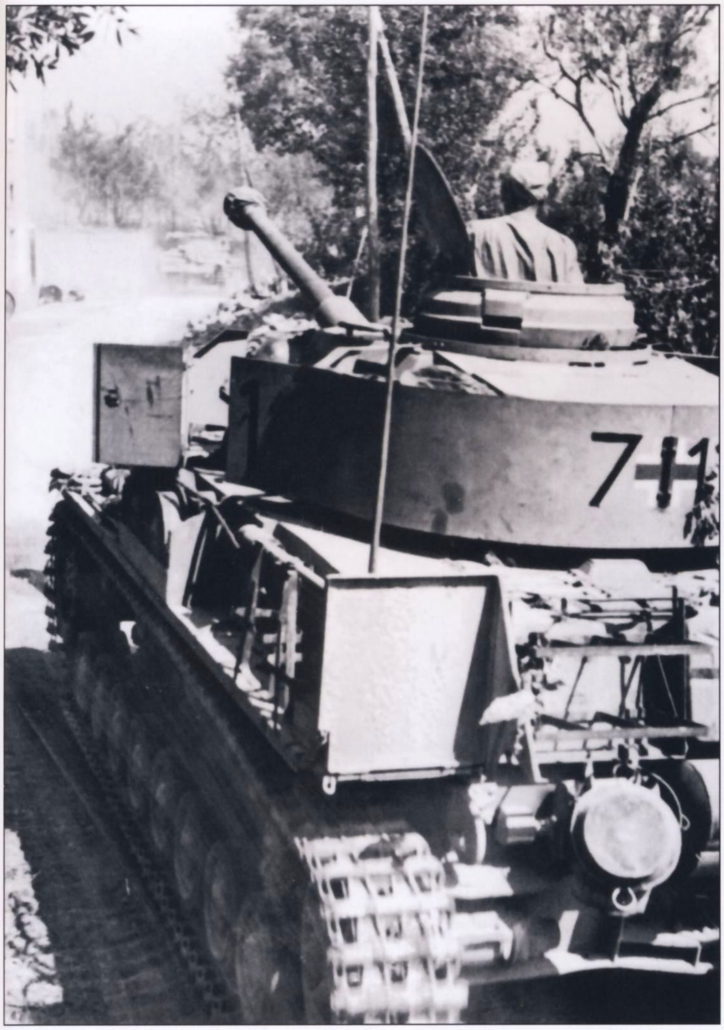


The early Pz.Kpfw.IV Ausf.F2 or Ausf.G was fitted with a single baffle round muzzle brake. These ones are from Pz.Abt. 'Großdeutschland', which was equipped with 12 Pz.Kpfw.IV Ausf.F2(G) in July 1942, around the same time the name was officially changed to Ausf.G. The Abteilung employed a unique method of marking their vehicles using either one, two or three horizontal lines representing the company followed by a single digit. The divisional emblem, a white 'stahlhelm' would also be seen painted on the left hinged mudguard. These ones appear to be painted in the two color tropical paint scheme.

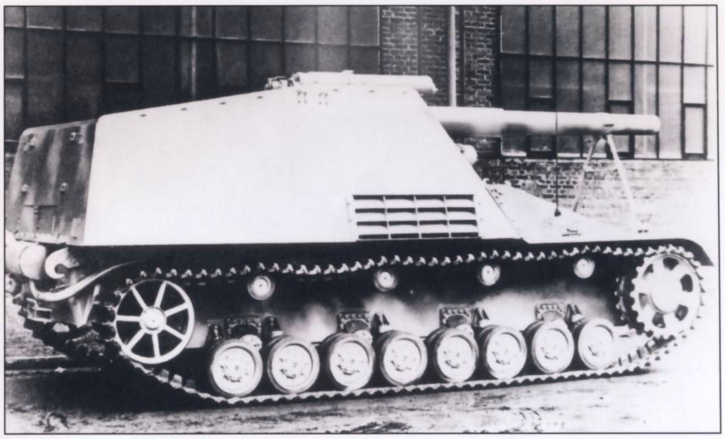
Smoke from several burning armored vehicles hangs over the battlefield as a Pz.Kpfw.IV Ausf.G and a Pz.Kpfw.III Ausf.L move forward toward their objective. The only external difference between the Ausf.F and Ausf.G was the new 7.5cm KwK L/43 gun. Initially, it was named Ausf.F2 but this was officially changed on 1 July 1942 to Ausf.G.



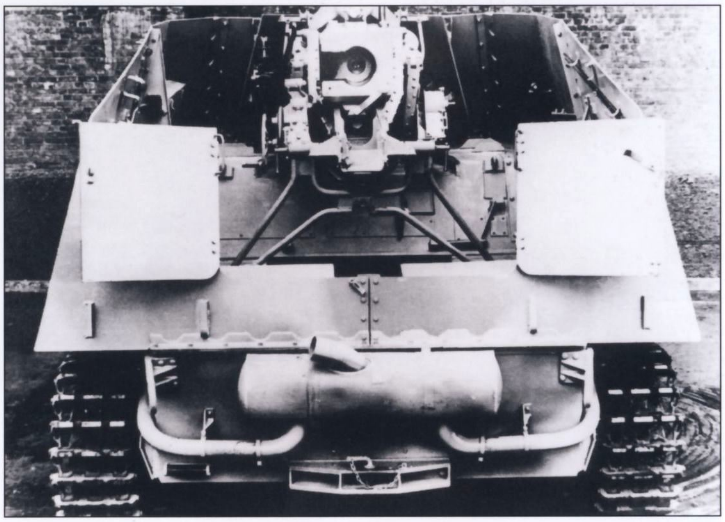
A Pz.Kpfw.IV Ausf.G waits in the assembly area for Operation Citadel to begin in late June or early July 1943. Additional 30mm armor plates were welded to the front of the hull and superstructure starting in May 1942 and the driver's periscopes were dropped in February 1943 around the same time as a new reinforced cupola with one-piece hatch began to be installed. This example still has the two-piece hatch which narrows down the production time to sometime in February 1943. Starting in April 1943, turret and hull Schürzen began to be installed on the Pz.Kpfw.IV Ausf.G as protection against Russian anti-tank rifles and was backfitted in field workshops after issue.



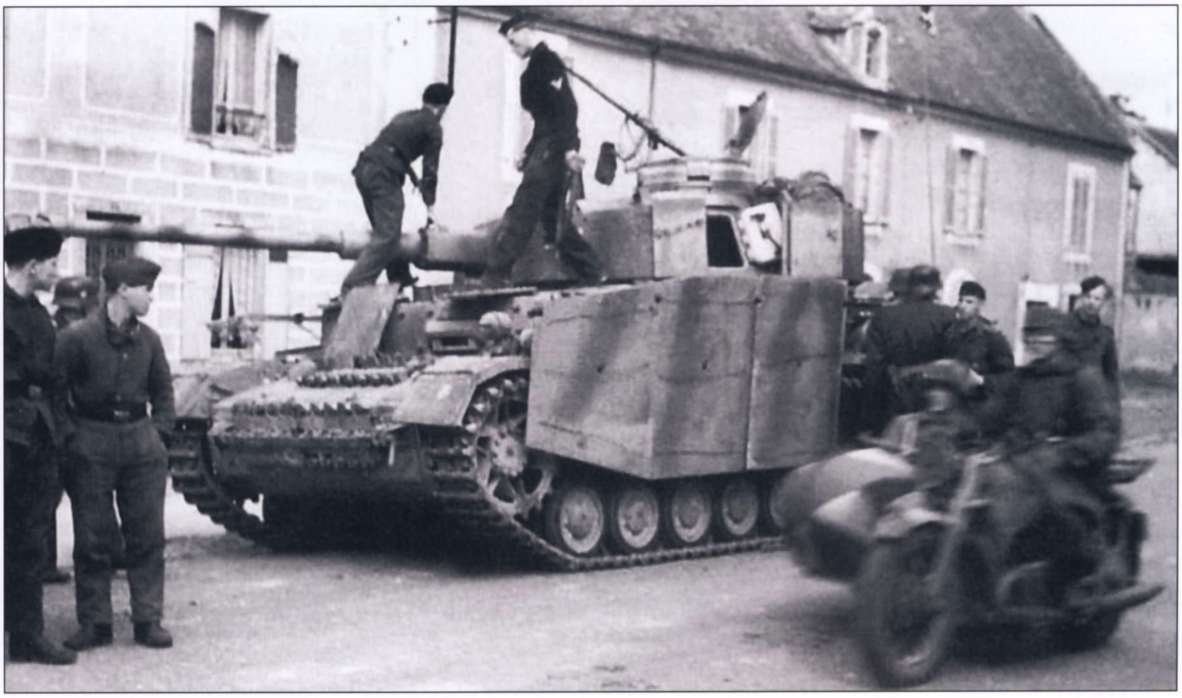
A Pz.Kpfw.IV Ausf.H from 7./Pz.Rgt. Hermann Göring in Italy in October 1943. A redesigned road wheel stowage bin was mounted on the left fender. The hull skirts and support brackets are missing from this example. The tactical number '711' is painted in black on the rear of the turret skirts and also on the sides – the last '1' can be seen on the rear access door. For some unknown reason, the vertical center of the Balkenkreuz was also repainted black when the numbers were added.



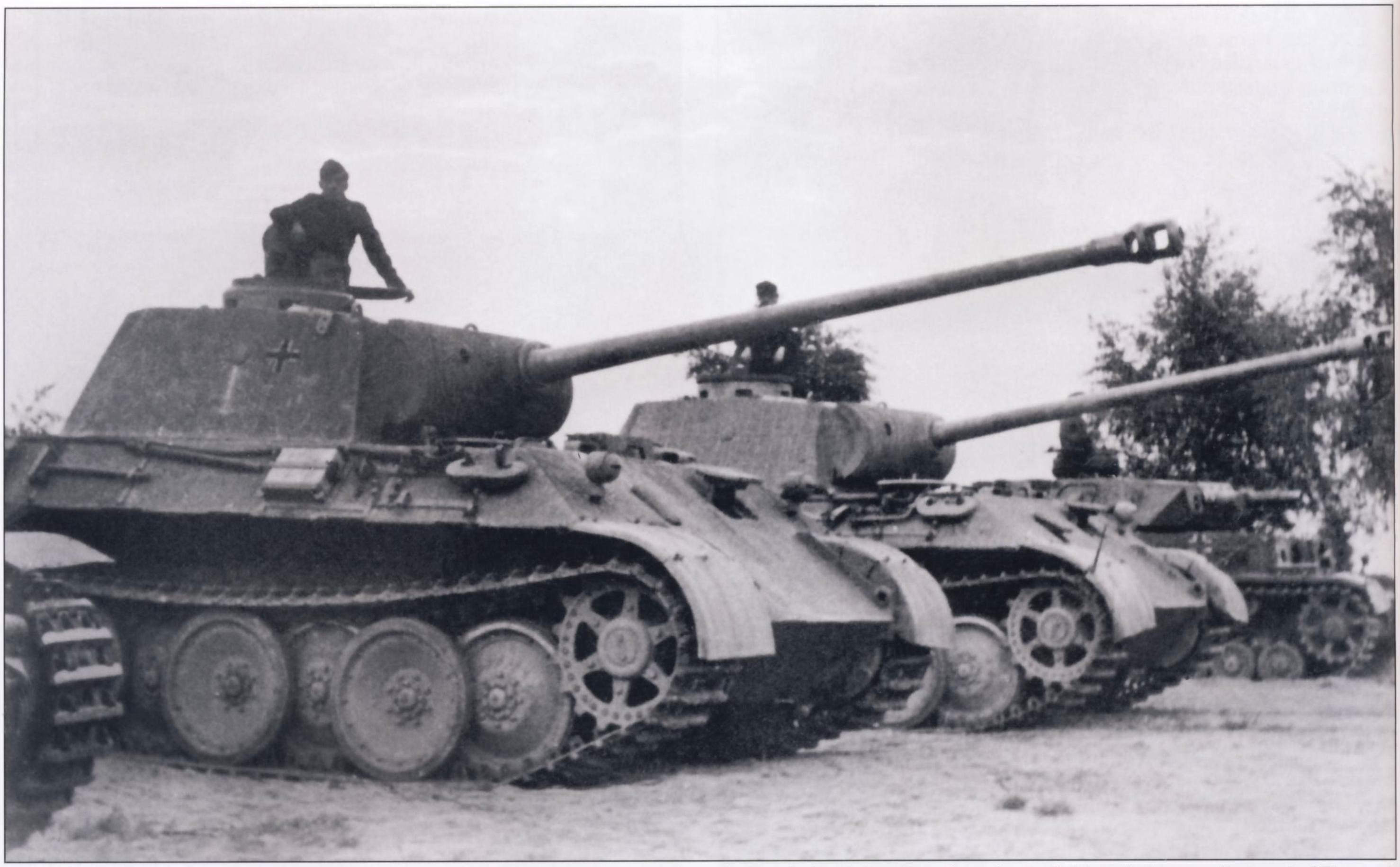
An early production Geschützwagen III/IV für sFH18/1 (Sf.), more commonly known as the Hummel. A 15cm sFH18 howitzer was mounted on a basic Pz.Kpfw.IV chassis with final drives from the Pz.Kpfw.III and was designed to provide mobile artillery support for the Panzer-Divisions. Normally one battery was equipped with six Hummel and two batteries with the Wespe in each division.



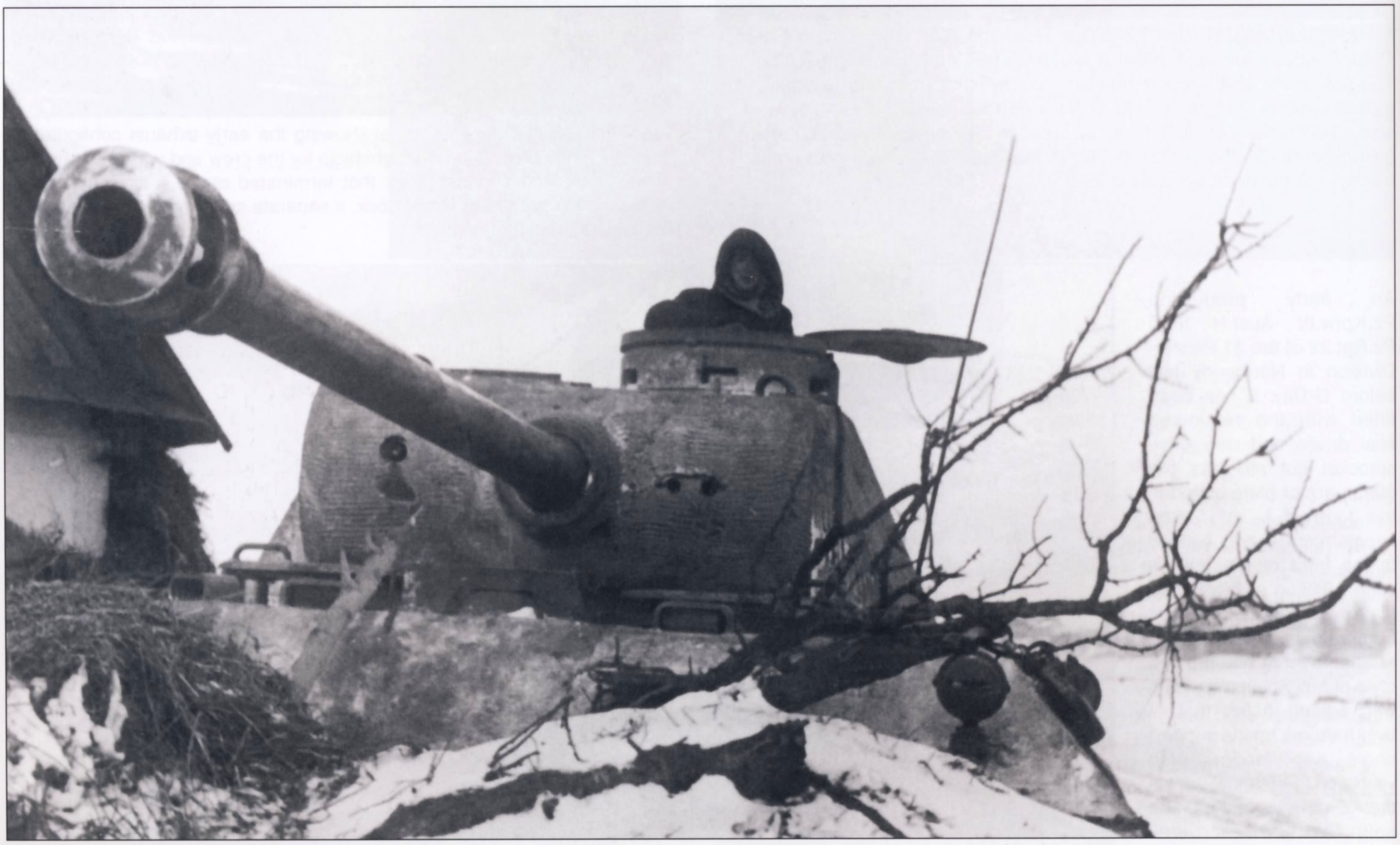
A rear view of the same Hummel showing the early exhaust configuration. The hot muffler proved to be an obstacle for the crew and was later changed to two un-muffled exhaust pipes that terminated at the rear of the hull. In addition to the front barrel travel lock, a separate support was provided in the rear for the breech.



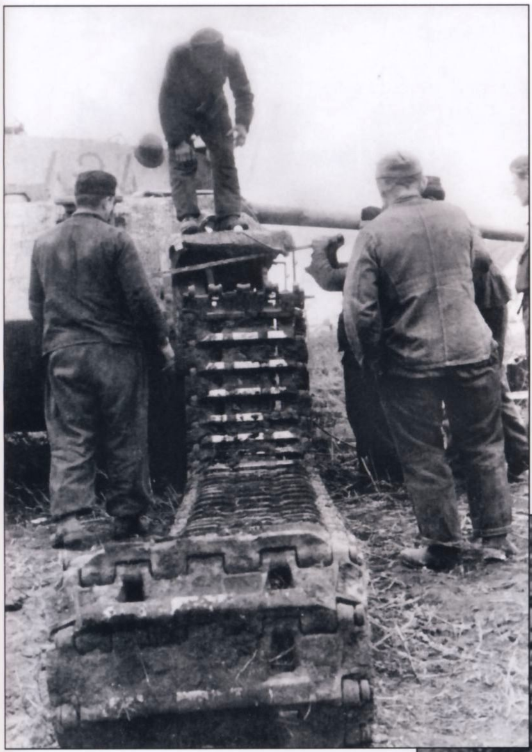
An early production Pz.Kpfw.IV Ausf.H from Pz.Rgt.22 of the 21.Panzer-Division in Normandy just before D-Day. It has been fitted with the reinforced final drives and new drive sprocket but still has the 30mm armor plate bolted to the front of the superstructure and welded to the front of the hull. In June 1943, a single 80mm plate replaced the previous 50mm plus 30mm plate arrangement. It has the first style of hull Schürzen plates with square holes that fit over hangers on the support angle and fender. Also visible on the original print is the Zimmerit coating on both the turret and hull skirts in addition to the front of the hull and turret as would be normally found.



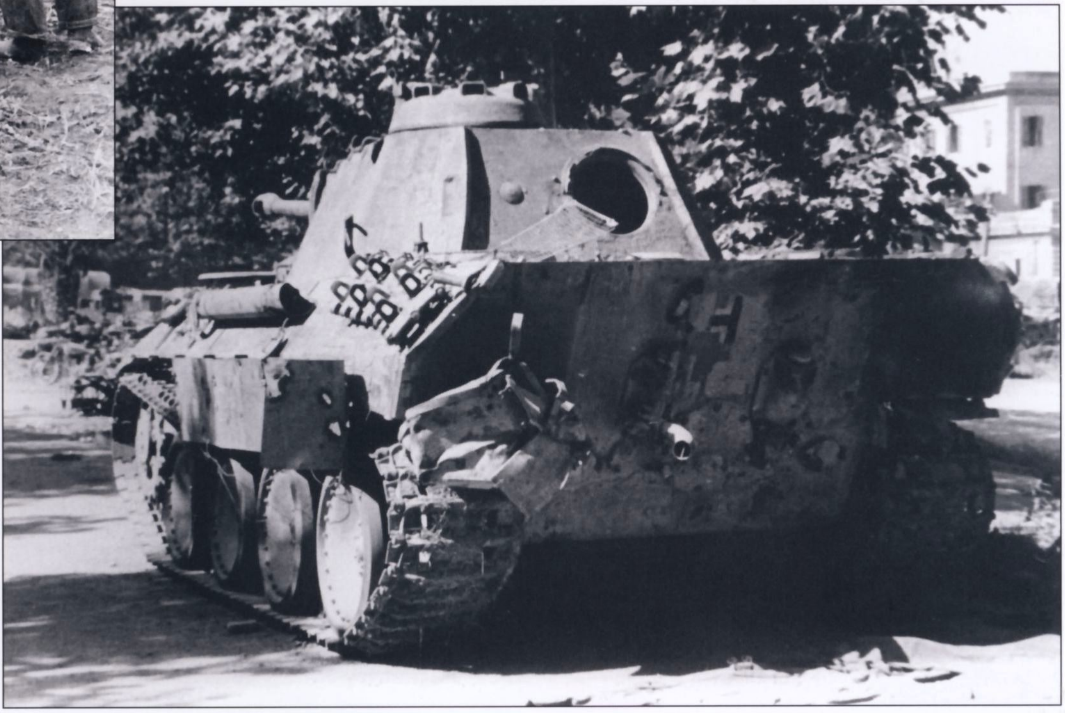
Two Pz.Kpfw. Panther Ausf.D and a Pz.Kpfw.IV Ausf.E mit Vorpanzer somewhere in Russia. Both Panthers have had a field workshop applied coat of Zimmerit and on the nearest one, the original 16 bolt road wheels can still be seen along with the bracket on the turret for the smoke discharger rack. On the left side of the photo, the drive sprocket and tracks from an early Pz.Kpfw.IV can be seen.



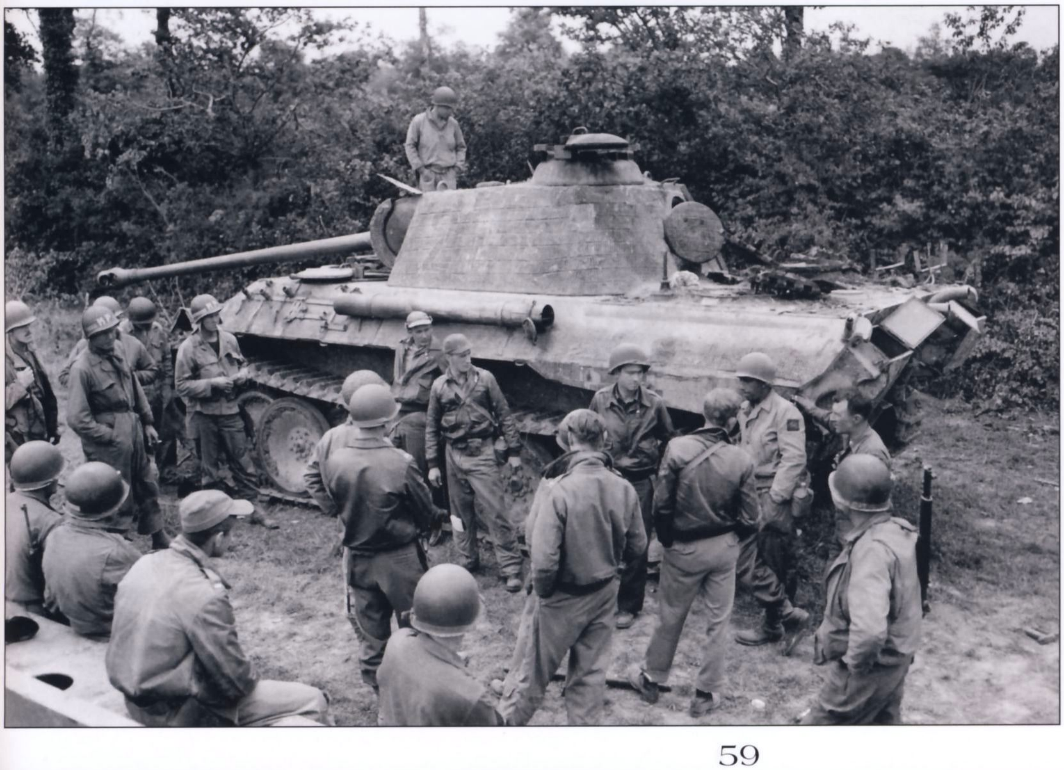
This Pz.Kpfw. Panther Ausf. D has been tentatively identified as belonging to I./SS-Pz.Rgt.2 of the 2.SS-Panzer-Division taken near Berditschew in January 1944. It also has a coat of field workshop applied Zimmerit. The Panther Ausf.D was armed with a 7.5cm KwK L/70 gun and although production began in January 1943, due to mechanical problems, it did not see action until July 1943 at Kursk.



A crewman uses a pry bar to straighten the fender on this Panther Ausf.D to facilitate repairing the track. The later track with the ice chevrons on the face were introduced in August 1943 and although different in design, were both technically referred to as Kgs.64/660/150. The tactical number '434' can be seen painted on the turret in either red or a weathered black color.

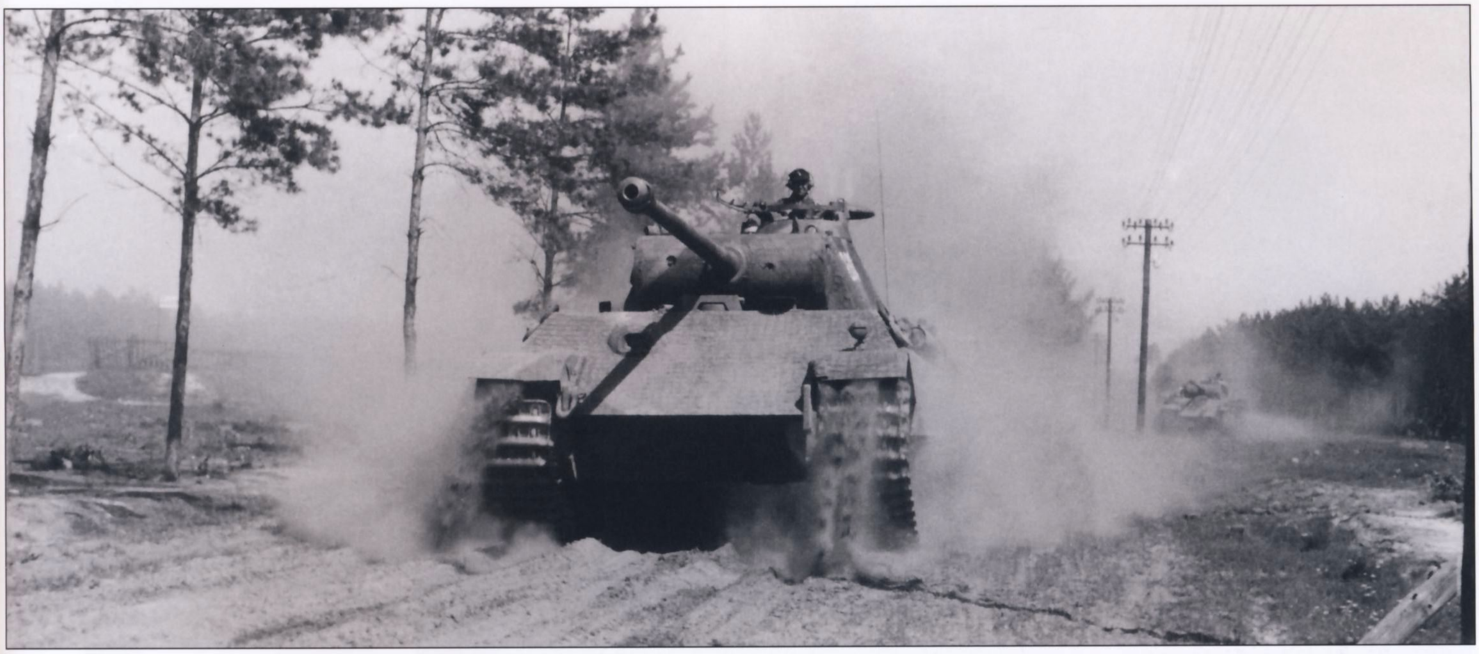


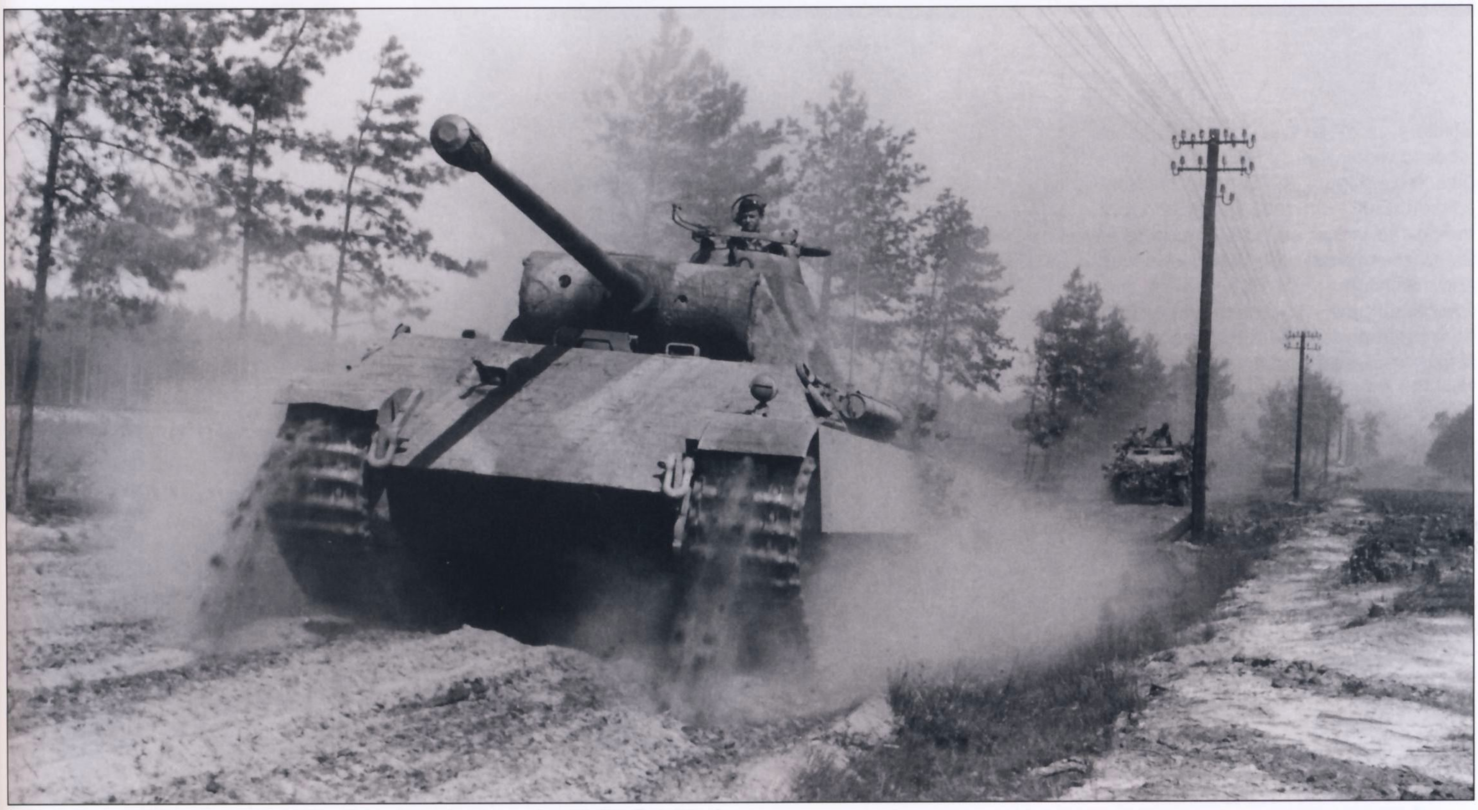
This damaged Pz.Kpfw. Panther Ausf.A is from I./Pz.Rgt.4 in Italy in 1944. A hit on the rear of the turret has torn away the rear escape hatch and grab handle and may have also been responsible for the missing commander's cupola hatch. Pistol port plugs in the sides and rear of the turret were deleted from production starting in December 1943. In response to the Allied landings at Anzio-Nettuno in January 1944, the Germans sent several armored units into the area including I./Pz.Rgt.4 equipped with 76 Panthers.



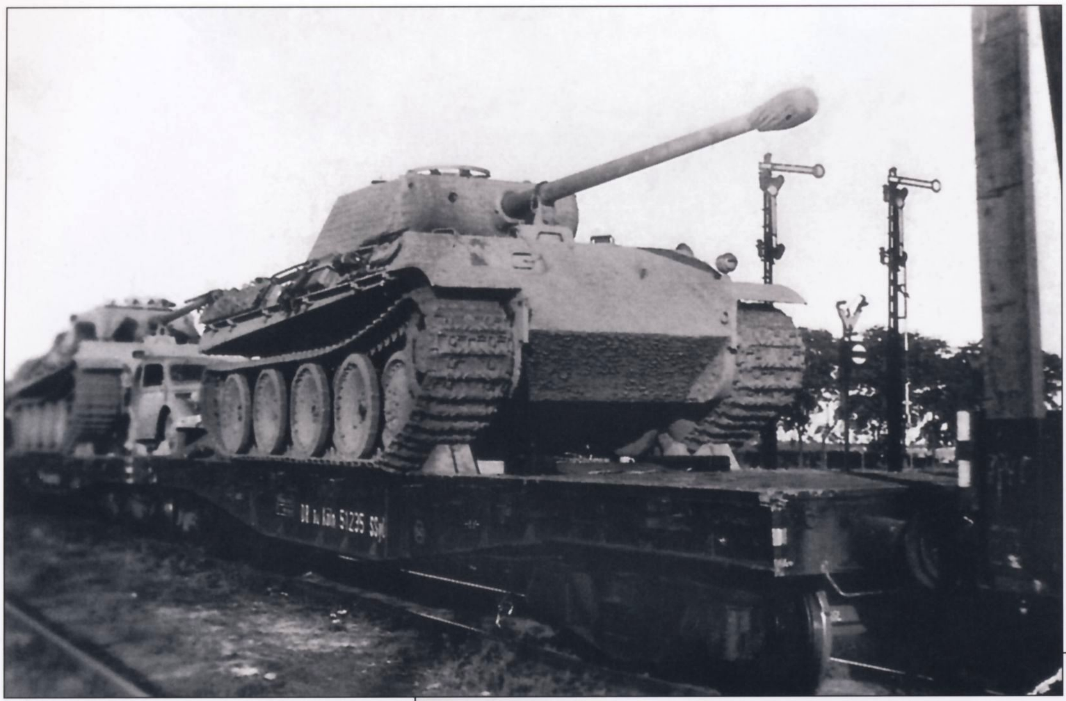
A knocked out Pz.Kpfw. Panther Ausf.A is inspected by U.S. fighter pilots who, accompanied by military police, are on a battleground tour to view the results of their attacks on German armor in the Normandy area in July 1944. The large red and white outlined turret numbers suggest that this Panther is from I./Pz.Rgt.6 of the Panzer-Lehr-Division. The division was equipped with 89 Panthers at the beginning of June 1944 of which, 36 were reported as lost in battle by 8 July 1944.

212

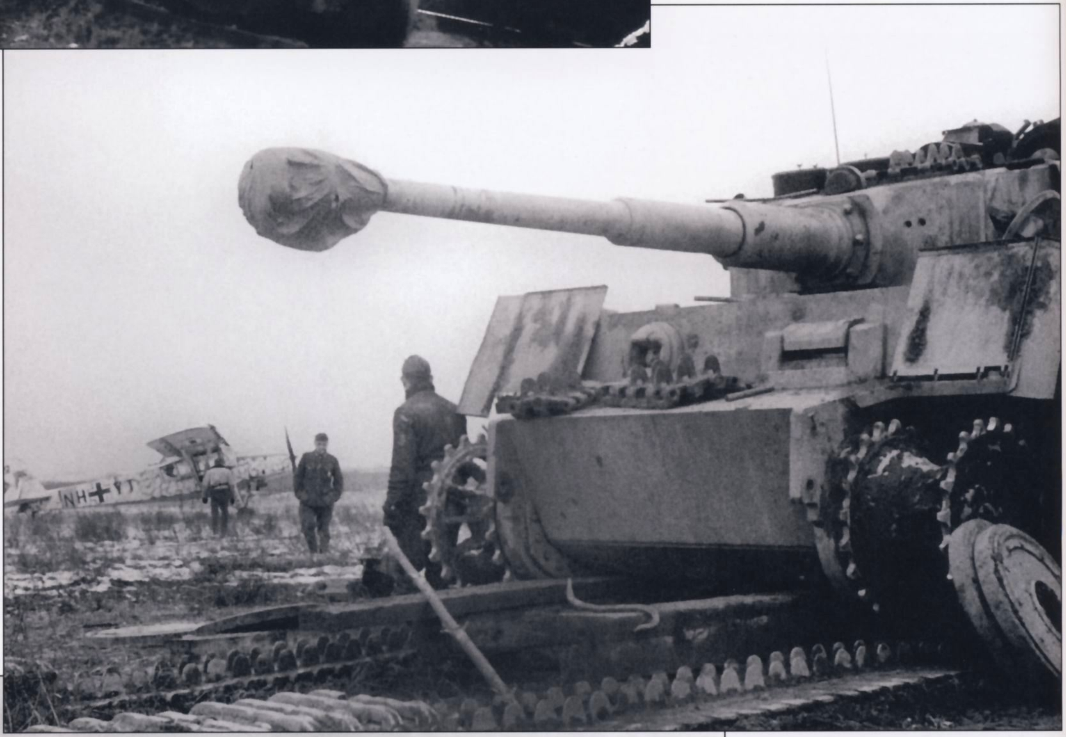




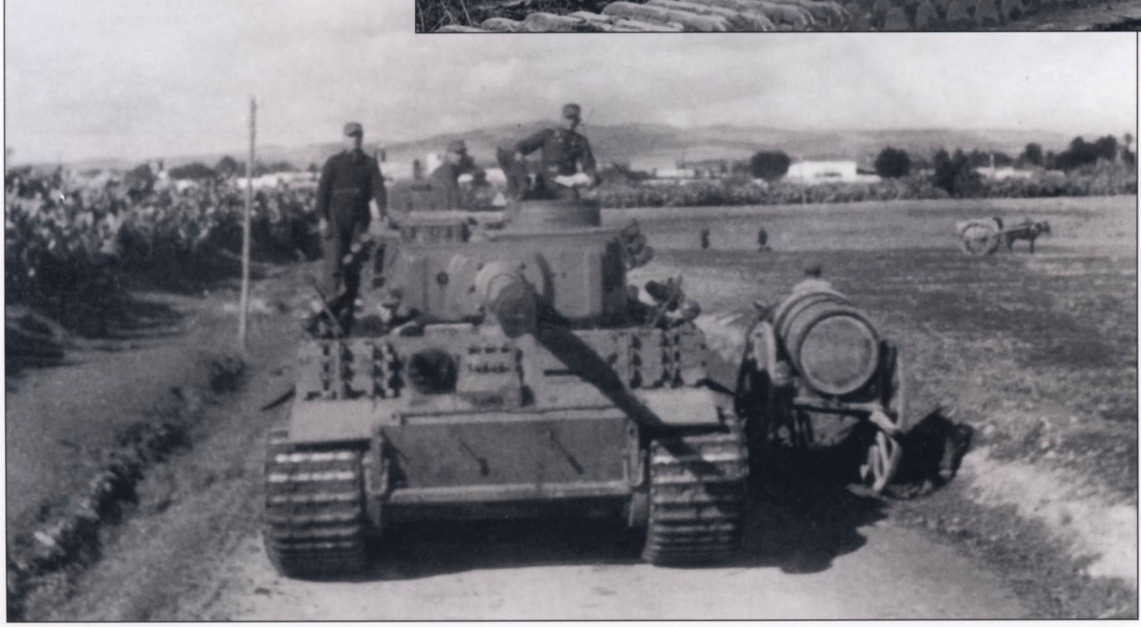
This series of photographs shows a column of Panthers from I./Pz.Rgt.27 of the 19.Panzer-Division taken in Poland in the summer of 1944. In the first photo, an Ausf.A with the tactical number '115' painted in white on the rear and sides of the turret and still retaining its full set of hull Schürzen can be seen following an Ausf.G. The next photo is of an Ausf.G with the tactical number '212' also painted in white. The rest of the photos are Ausf.G on some of which can be seen white tactical numbers as well. This Zimmerit pattern suggests that the Panther Ausf.G were built by M.A.N. In August 1944, the regiment reported 79 Panthers ready for combat.



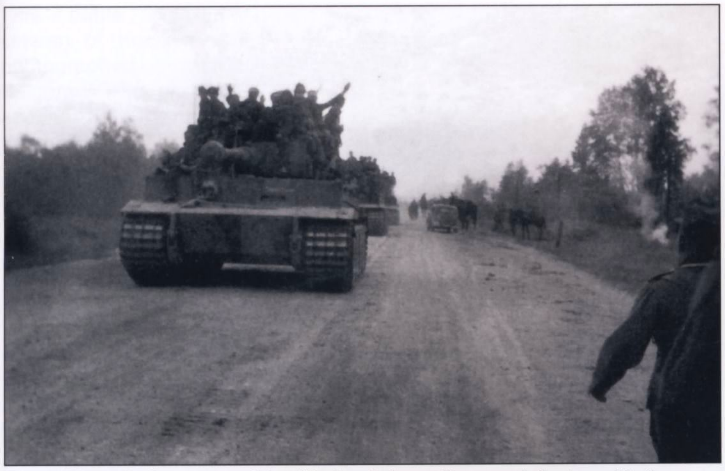
This new Pz.Kpfw. Panther Ausf.G loaded on a train headed for the front lines. The rough textured Zimmerit indicates it was manufactured by Daimler-Benz sometime before 10 September 1944, when the application of Zimmerit was discontinued. The application of markings including the Balkenkreuz was done once the vehicles arrived at their destination.



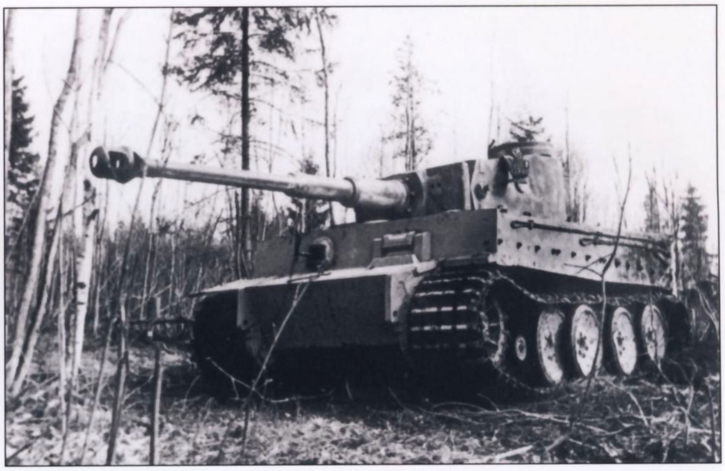
Soldiers from a Werkstatt Kompanie labor to repair the damaged track on a disabled Tiger I, possibly from s.Pz.Abt.502 on the Eastern Front during the winter of 1942-43. Some of the road wheels have been removed and hull of the Tiger blocked up with wood beams to facilitate their replacement. It appears that the pilot of a Feisler Storch has dropped in to see how the repairs are progressing and is about to leave. Just visible above the swastika on the tail of the aircraft is painted a command flag for the commander of a Panzergruppe. Note the straightened 'S' hook on the wood beams in front of the Tiger.



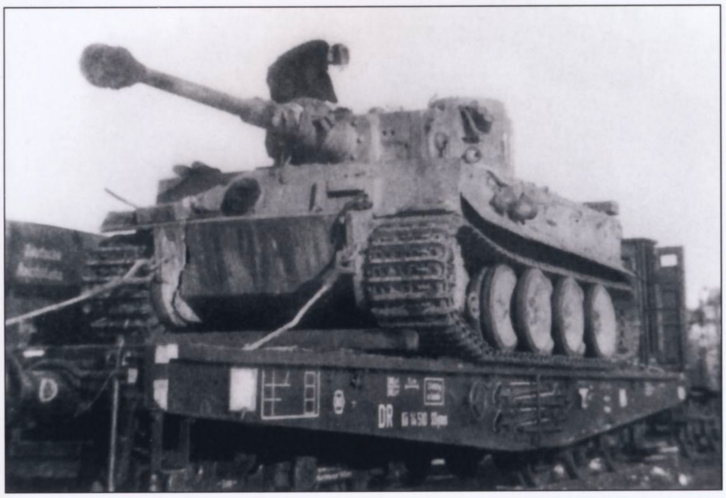
A Tiger I from 2./s.Pz.Abt.501 in Tunisia in the spring of 1943. Unlike the Tigers from 1.Kompanie, the Tigers in the 2.Kompanie left their two Bosch headlights mounted on the top of the hull in their original positions. They also mounted spare track links on the front of the upper hull. While elements from 1./s.Pz.Abt.501 arrived in Bizerte on 23 November 1942, the first 8 Tigers from 2.Kompanie did not arrive until early January 1943.



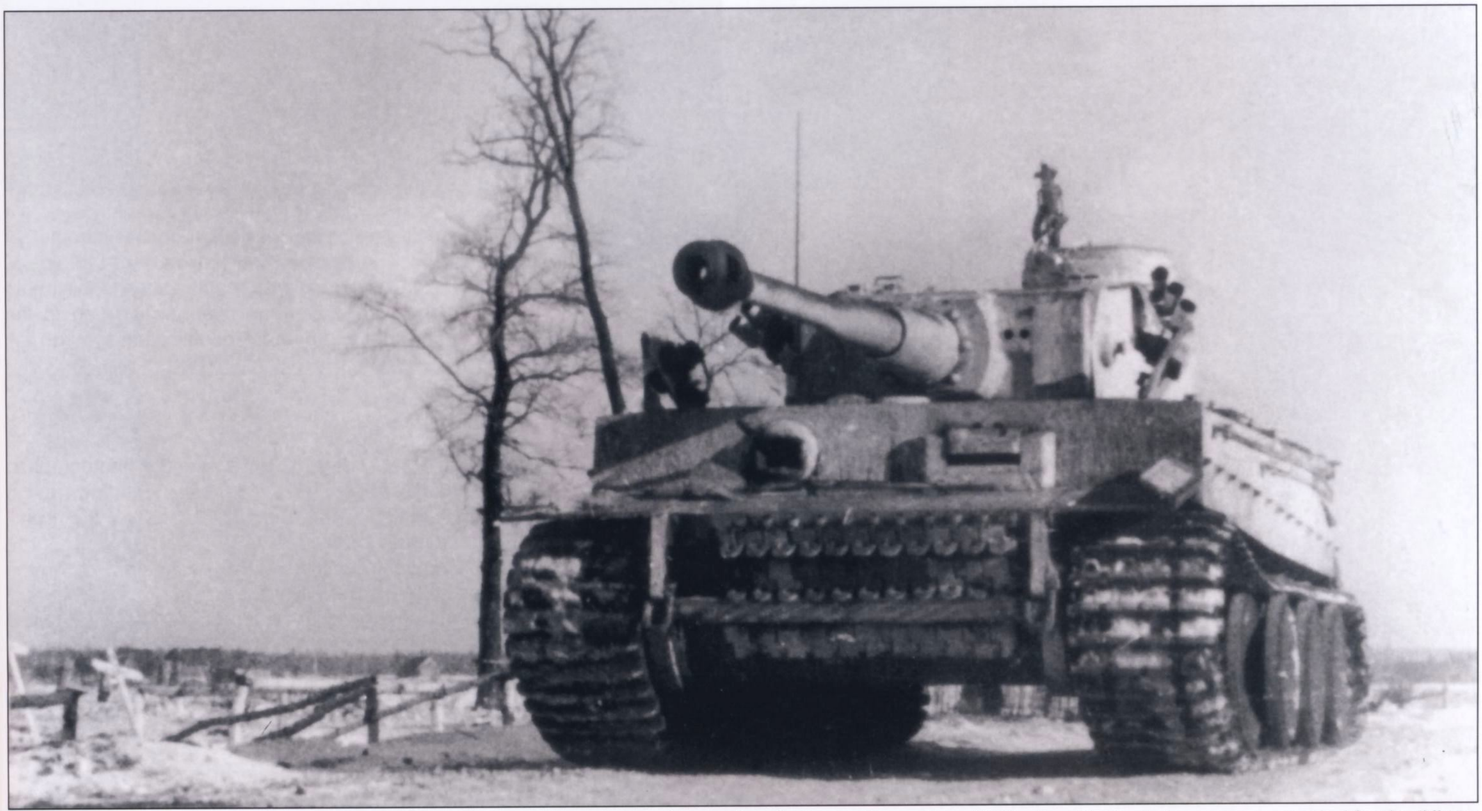
Three Tiger I's from an unidentified unit ferry German infantry with them as they head to their next assignment. Often, due to losses or mechanical breakdowns, the Tigers were thrown into battle in small groups to react to a dangerous development on the front lines.



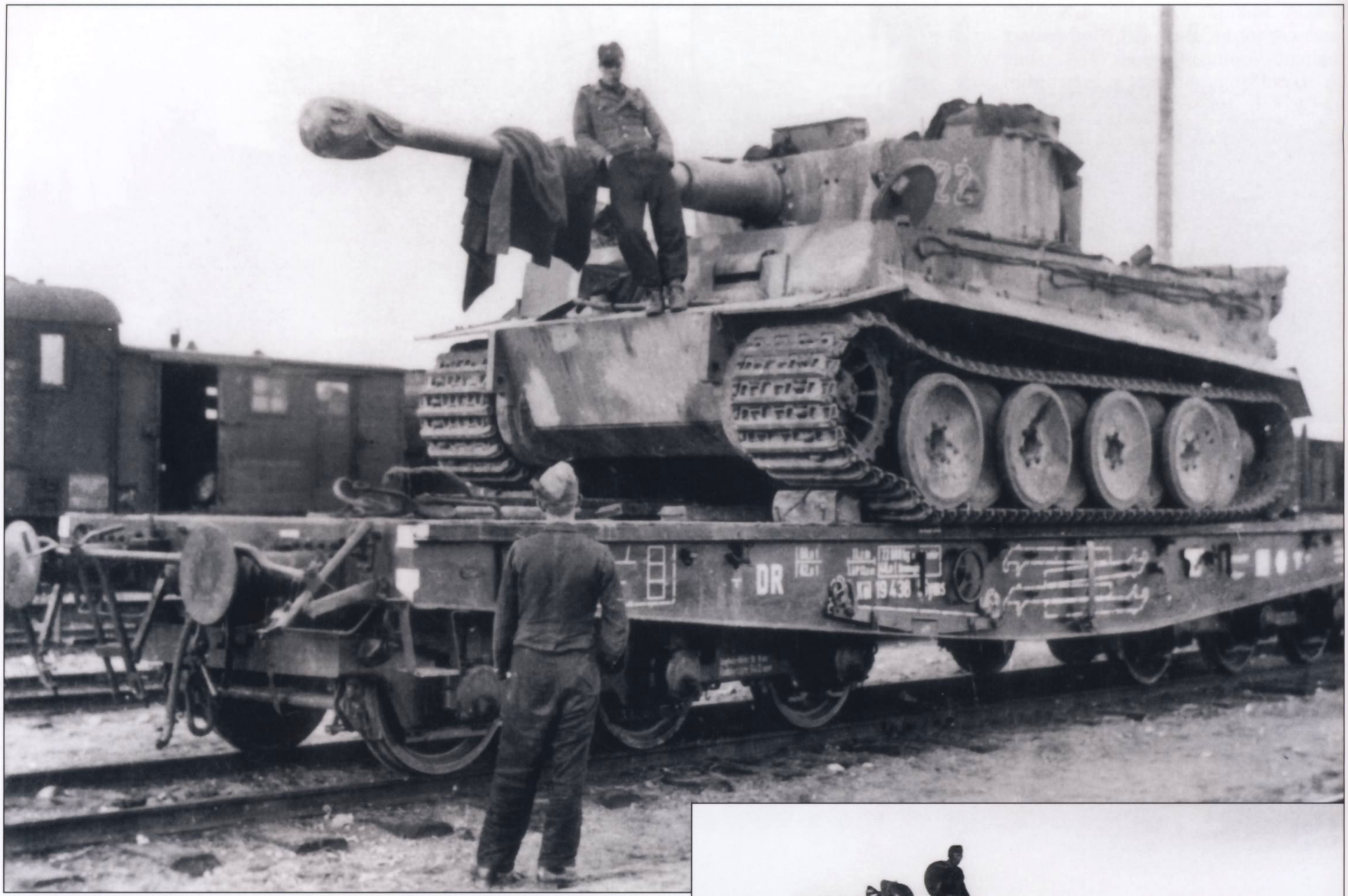
Another Tiger I from s.Pz.Abt.502 in Northern Russia. It has the gun mantlet with the reinforcing around the gun sight that was introduced in November 1942, although some Tigers continued to be produced with the un-reinforced mantlet to use existing stocks. It also is fitted with the Nebelwurfgeraet (smoke candles) on the turret sides that were introduced in October 1942. These were dropped from production in June 1943 as a result of crew complaints that small arms fire could set them off and reduce visibility from inside the tank. Note the missing front road wheel.



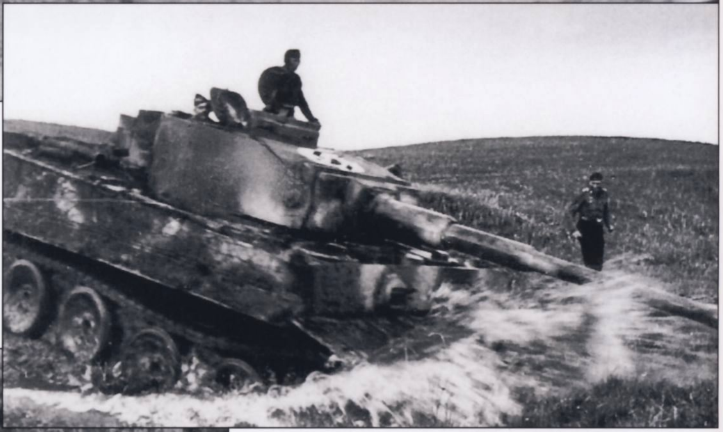
A Tiger I from 1./s.Pz.Abt.503 loaded on a rail car for transport to the front. Normally, it would be fitted with the narrow transport tracks for rail movement but still retains its wide battle tracks. It is an early production vehicle with the original short hull side extensions for the 'U' tow hooks. The hull sides were extended in December 1942 and the holes drilled at the bottom to permit them to move more freely. It is probably one of the first 4 Tiger I's issued to s.Pz.Abt.503 in November 1942.



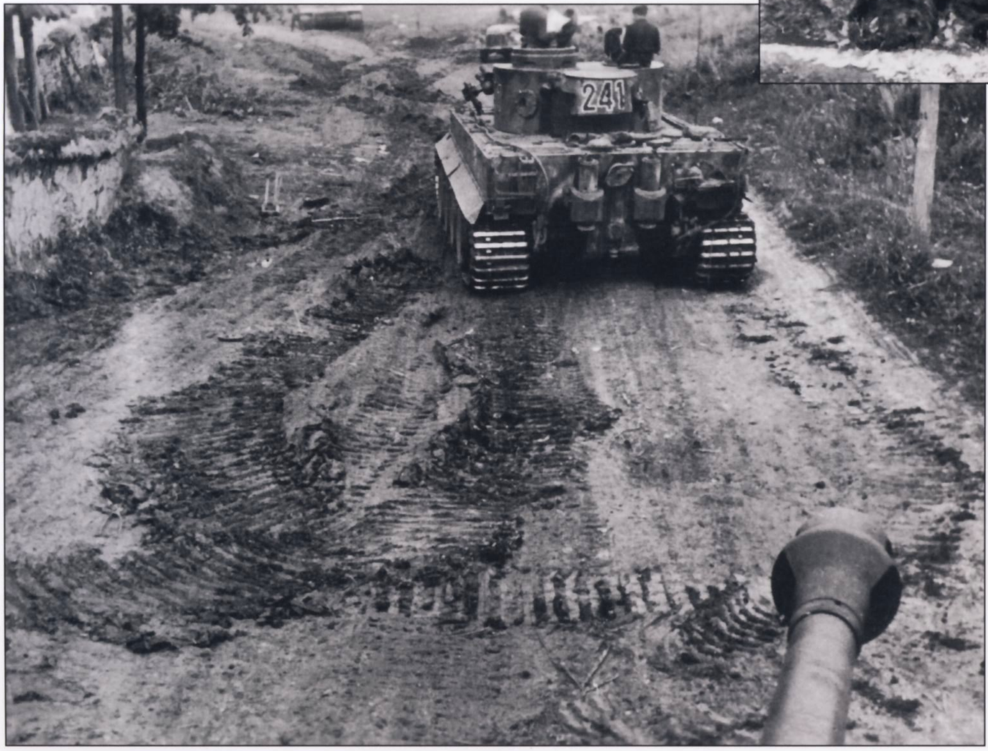
This winter whitewashed Tiger I from an unidentified unit was produced sometime between December 1942 when the hull sides were extended for the 'U' tow hooks and March 1943 when a periscope for the loader was installed in the turret roof. Note the missing front road wheel.



A Tiger I from s.Pz.Abt.505 entrained for movement on the Eastern Front. The small white outline tactical numbers typical of this unit at the time can be seen painted on the side of the turret. It was produced after June 1943 when mounting smoke dischargers on the sides of the turret was discontinued. There are 5 spare track holders on the left side of the turret that were introduced in April 1943 although no spare track links are mounted. The silhouette of an S-mine discharger can be seen on the left side as well as the Feifel air filter on the rear of the hull.

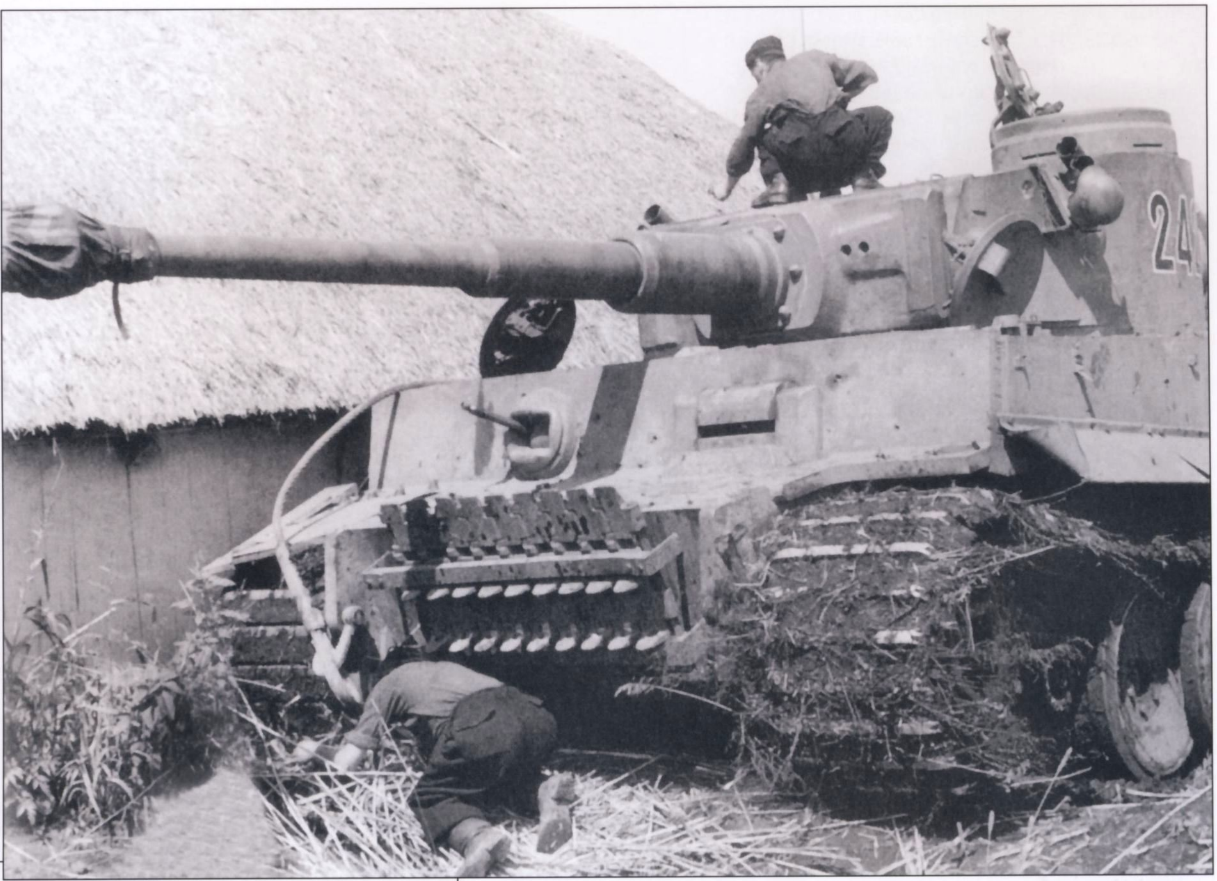


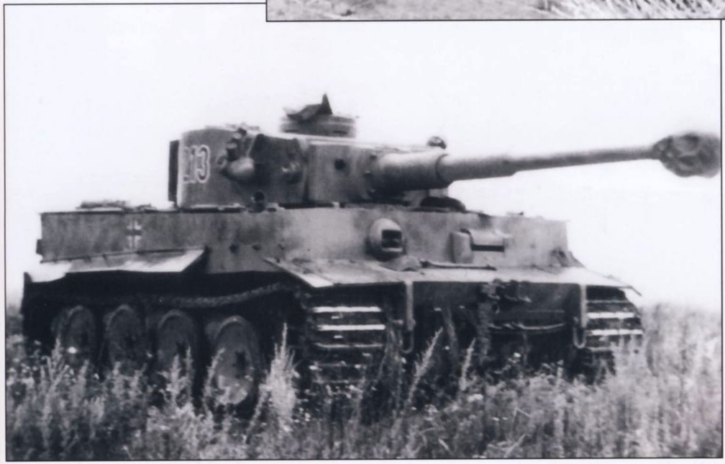
An early Tiger I from s.Pz.Abt.505 plunges into a small stream in Russia during the summer of 1943. The barbed wire that was fixed to side of the vehicles of this unit can be seen in this photo along with a German national flag tied to the turret roof as an aerial identification symbol.



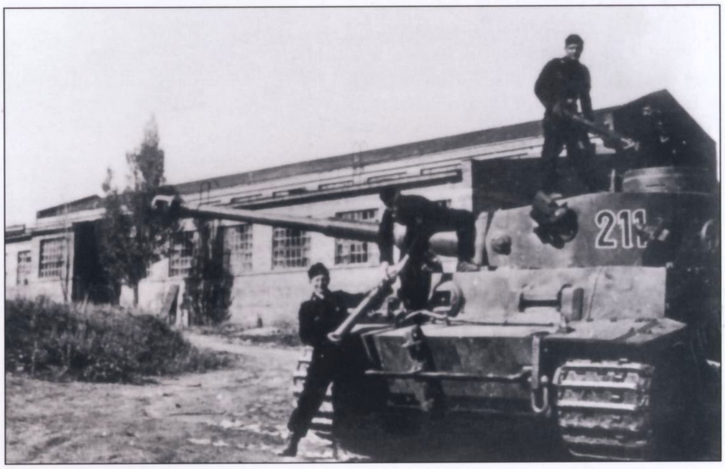
A Tiger I from 2./s.Pz.Abt.503 photographed near Belgorod in the days leading up to Operation 'Zitadelle', the attack on the Kursk salient in July 1943. Each of the three companies in the unit was assigned to one of the three Panzer-Divisions which formed part of III.Panzer-Korps for the attack. The 2.Kompanie was assigned to 19.Panzer-Division. A variety of different turret stowage bins were mounted on the Tigers of s.Pz.Abt.503, in this case one taken from a Pz.Kpfw.III. A later photograph of this Tiger shows that it was later replaced with a standard bin and can be seen on page 18 in Concord 7035 'Panzer-Division 1935-1945 (3) War on Two Fronts 1943-1945' after it was abandoned.

This battle scarred veteran of Kursk was photographed near Belgorod shortly afterwards. It is also from 2./s.Pz.Abt.503. Other than a missing front fender and track cable it shows little damage. A small caliber impact can be seen just in front of the smoke discharger mount on the turret. Also note the missing front road wheel and the amount of mud that has built up around the drive sprocket and between the next pair of road wheels. It was not uncommon to see Tigers with this wheel removed on each side due to a build up of mud. This Tiger appears to be painted in Dunkelgelb RAL 7028 without any other camouflage paint.

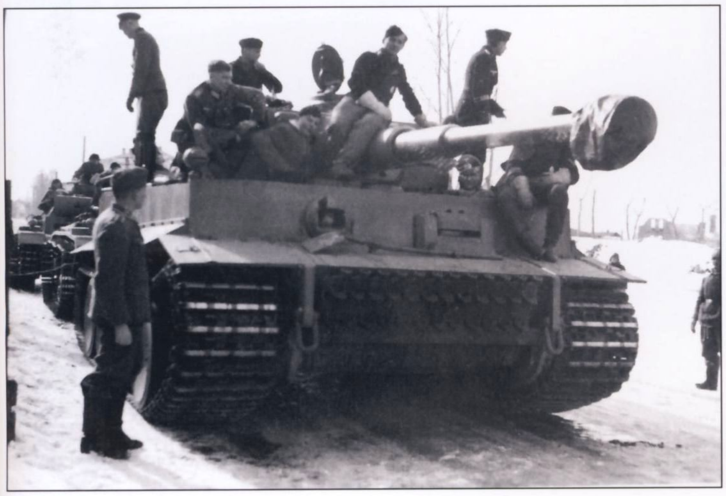




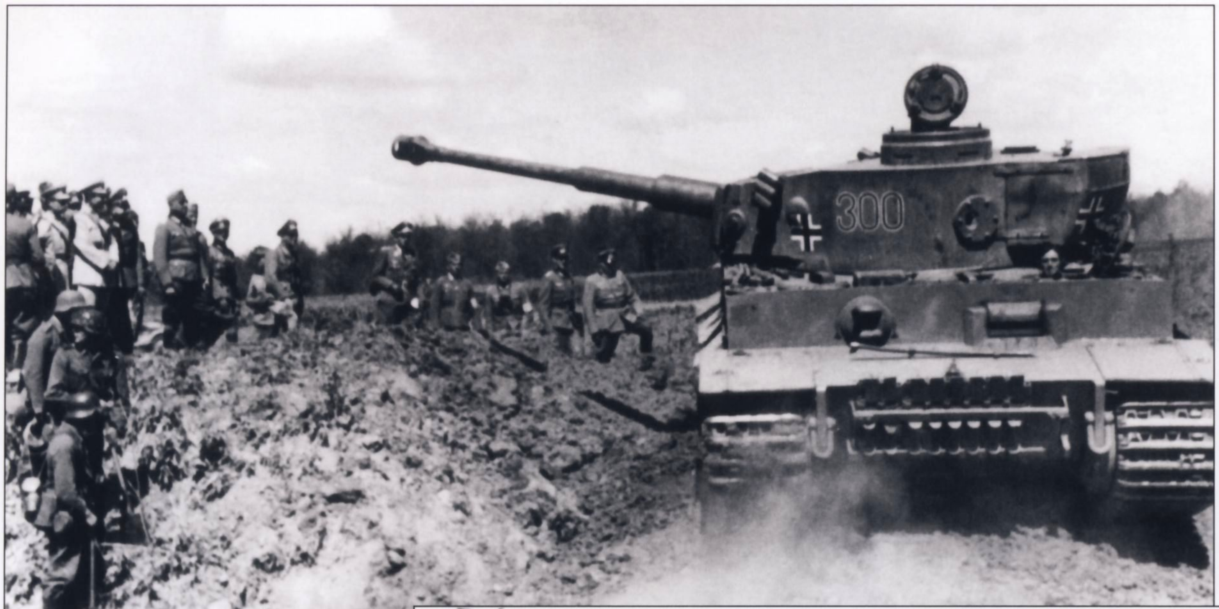
Tiger ‘213’ from 2./s.Pz.Abt.503 also displays some battle damage in the form of missing and damaged fenders. As they were only made of thin steel sheets, they were often the first part of the vehicle to be damaged or lost. This Tiger is also painted in Dunkelgelb RAL 7028 but with a more subdued camouflage scheme of Rotbraun RAL 8017 and Olivgrün RAL 6003 patches than ‘211’.



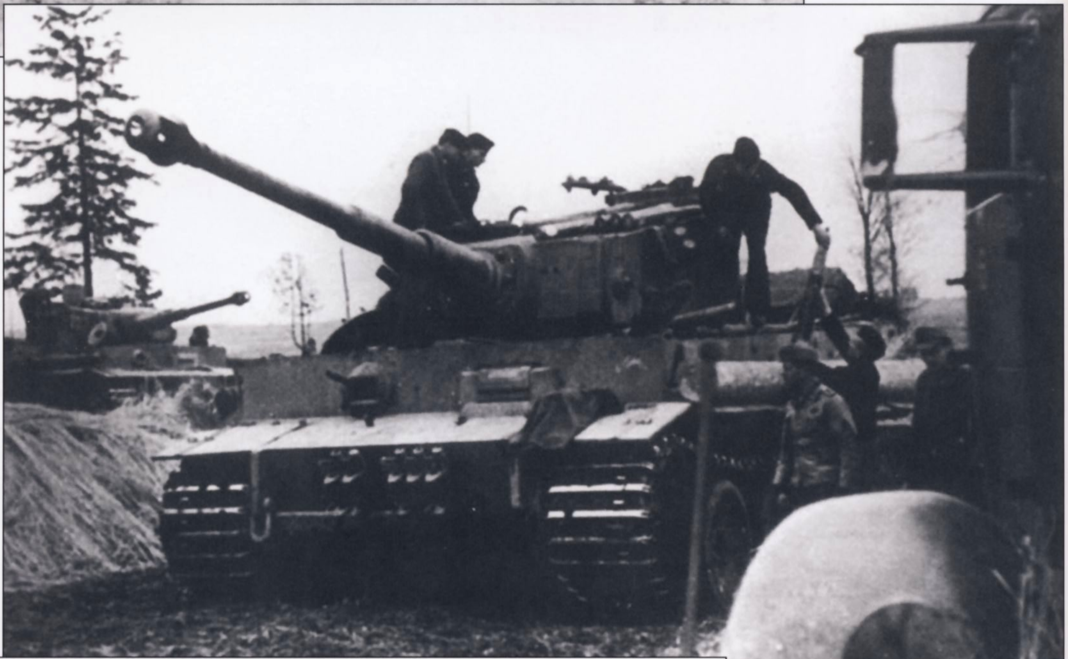
The crew of Tiger ‘211’ from 2./s.Pz.Abt.503 replenish their ammunition supply after the battle. Russian counterattacks on the German positions immediately following the decision to end the offensive, forced them to defend the ground that had been previously occupied. The Tiger is painted in Dunkelgelb RAL 7028 with a camouflage scheme of Rotbraun RAL 8017 and Olivgrün RAL 6003 patches. Note the different spare track hanger bar on the front consisting of a single bar welded to the hull instead of two as seen on the previous Tiger.



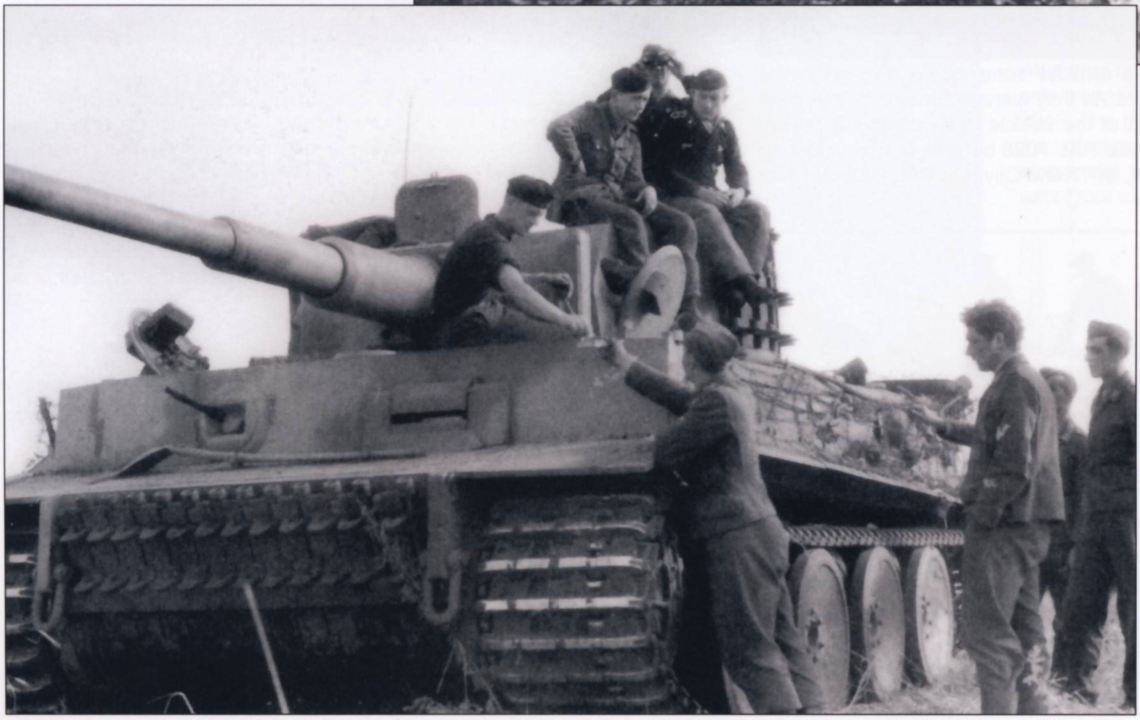
A Tiger I from 13.schwere Panzer-Kompanie of Panzer-Regiment ‘Großdeutschland’, which was formed from 3./Pz.Rgt.203 on 13 January 1943. They were originally equipped with 9 Tiger I’s and 10 Pz.Kpfw.III Ausf.L. In May 1943, they received an additional 6 Tigers and were issued with another 31 in late June and early July for the Kursk offensive.



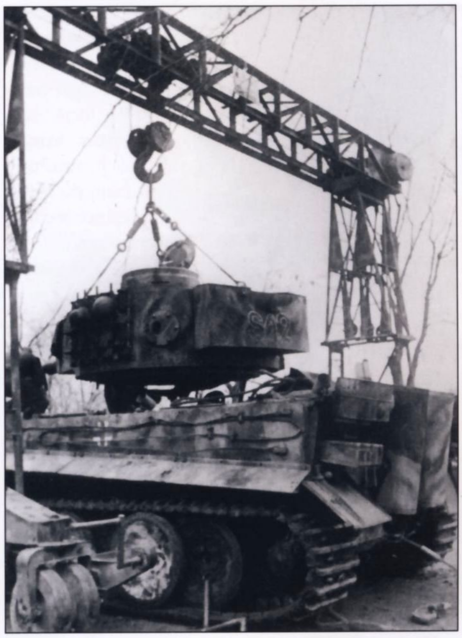
Tiger '300' from 3./s.Pz.Abt.503 was the personal vehicle of the third company commander, Oberleutnant Walter Scherf. It is shown here during a demonstration for a Turkish military delegation on 26 June 1943. This Tiger was later damaged and had to be abandoned because it could not be recovered. At the start of the offensive, s.Pz.Abt.503 was equipped with 45 Tigers and ended the battle with only three losses.

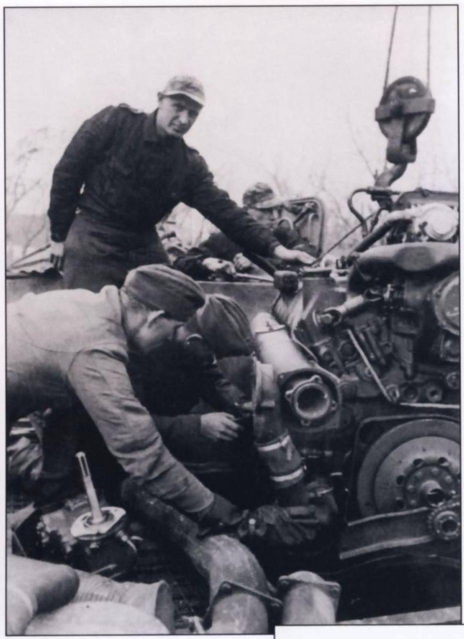


The raging bull emblem of s.Pz.Abt.505 can be seen painted on the front plate beside the driver's visor on this Tiger I. The unit was formed from elements of the 3. and 26.Panzer-Divisions on 12 February 1943. They were issued with their first 2 Tigers in February 1943, another 18 in March (along with 25 Pz.Kpfw.III Ausf.M) and 25 more Tigers in June. They fought with Heeresgruppe Mitte during the Kursk offensive.

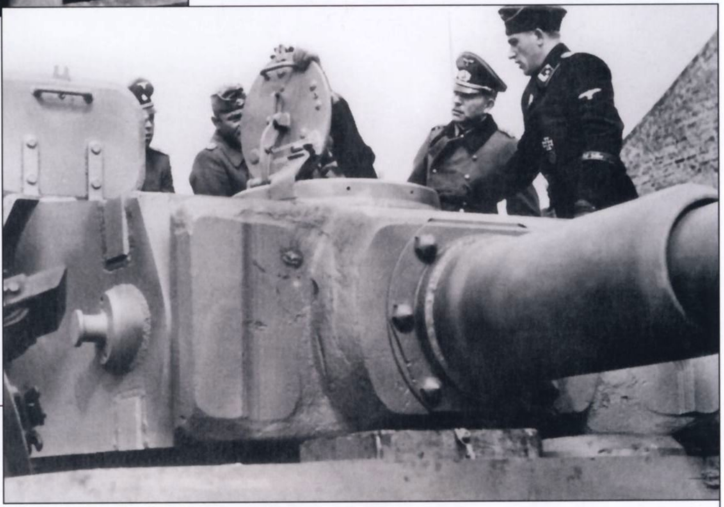


Some Tigers from s.Pz.Abt.505 had barbed wire fastened to the sides of the hull to prevent enemy tank hunters from attempting to climb on the vehicle. At the beginning of the Kursk offensive, 1. and 2.Kompanie had 31 operational Tigers of which only four were reported as losses during the battle.

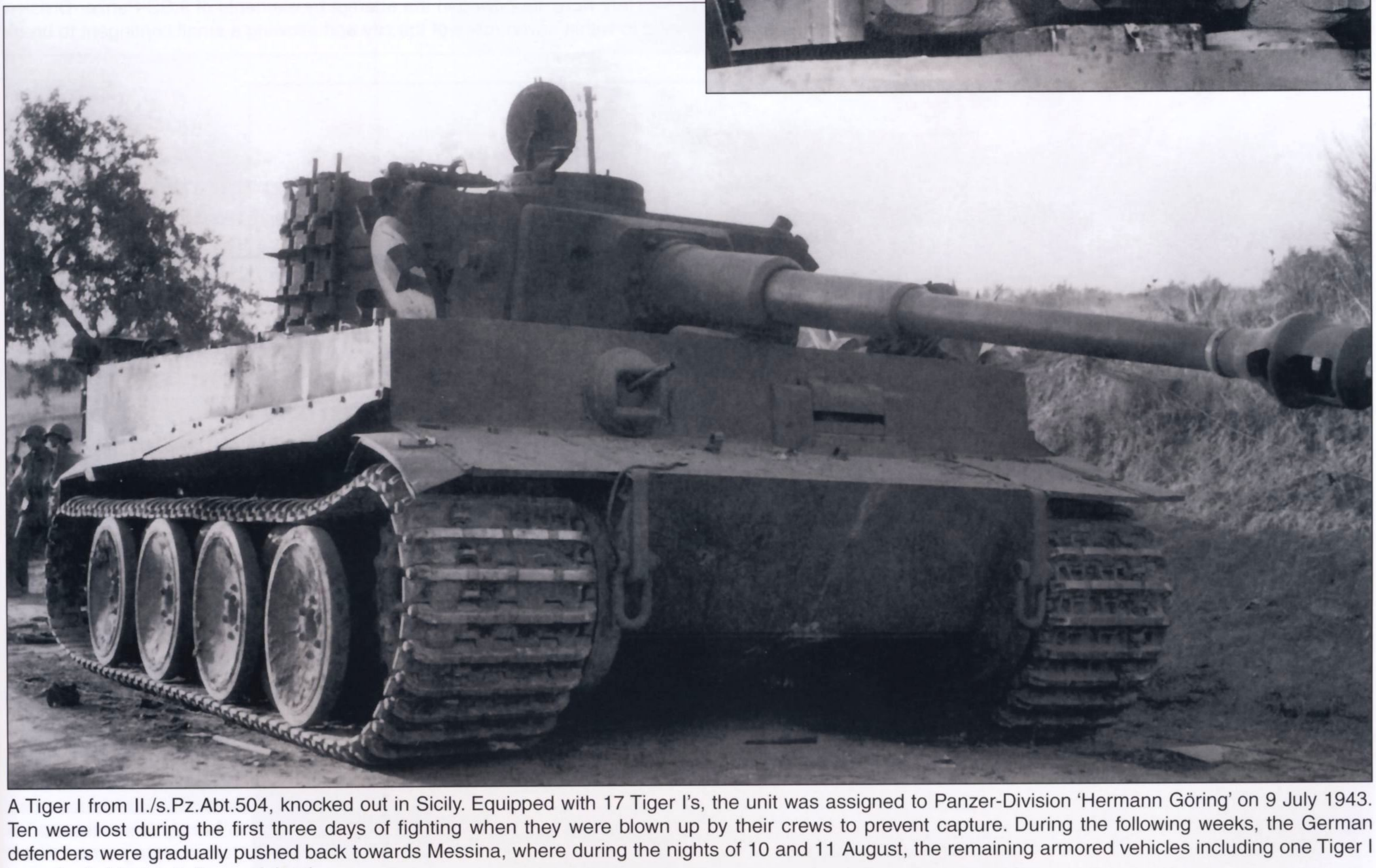




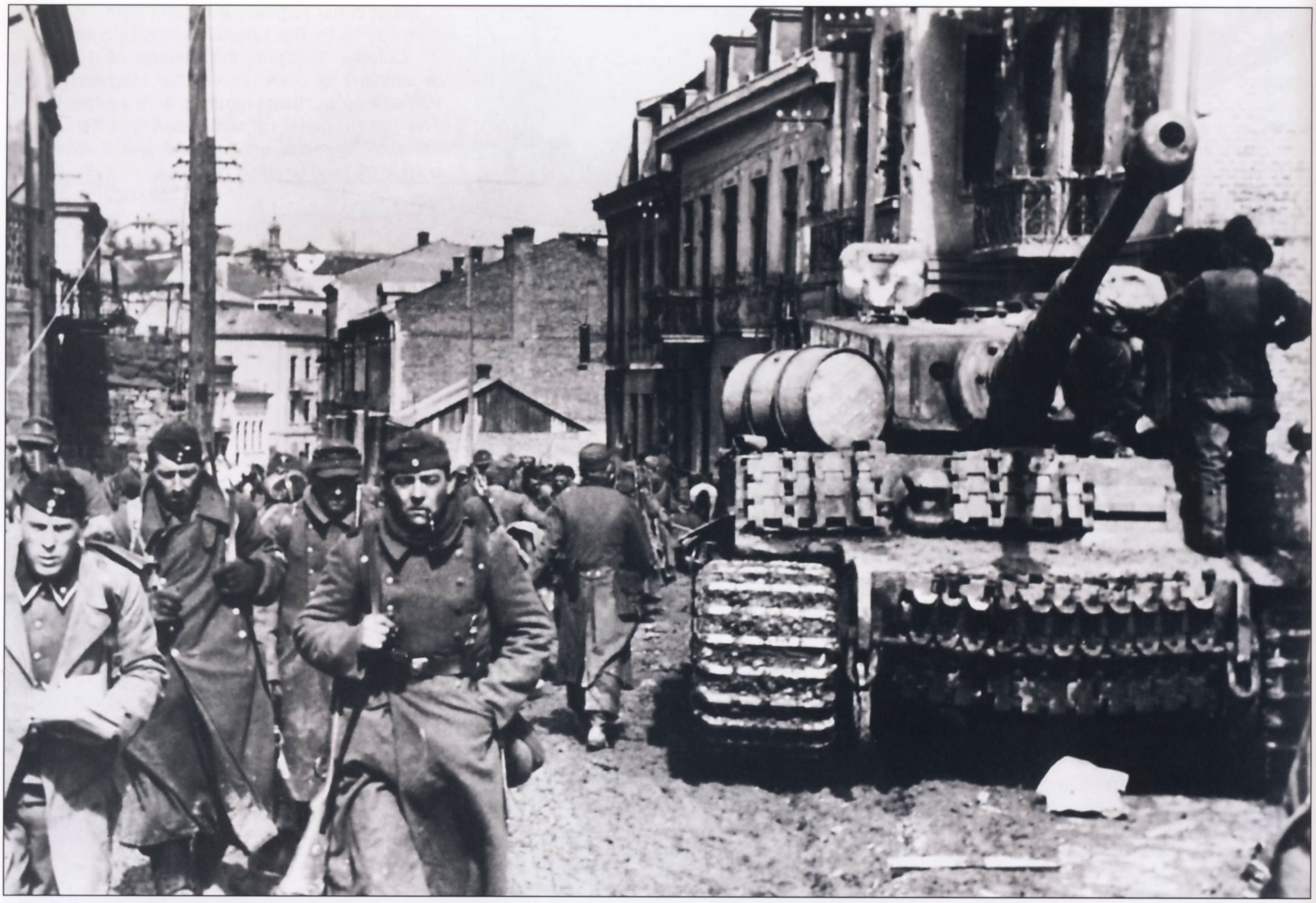
A portal crane removes the turret from Tiger 'S12' from 13./SS-Pz.Rgt.1 (renamed s.SS-Pz.Abt.101 on 22 October 1943) in the autumn of 1943. The accompanying photo shows the Maybach HL230 P45 V12 engine being removed from another Tiger I. The 700 HP motor consumed almost 3 liters of fuel for each kilometer on the road and 5 liters over normal off-road terrain.



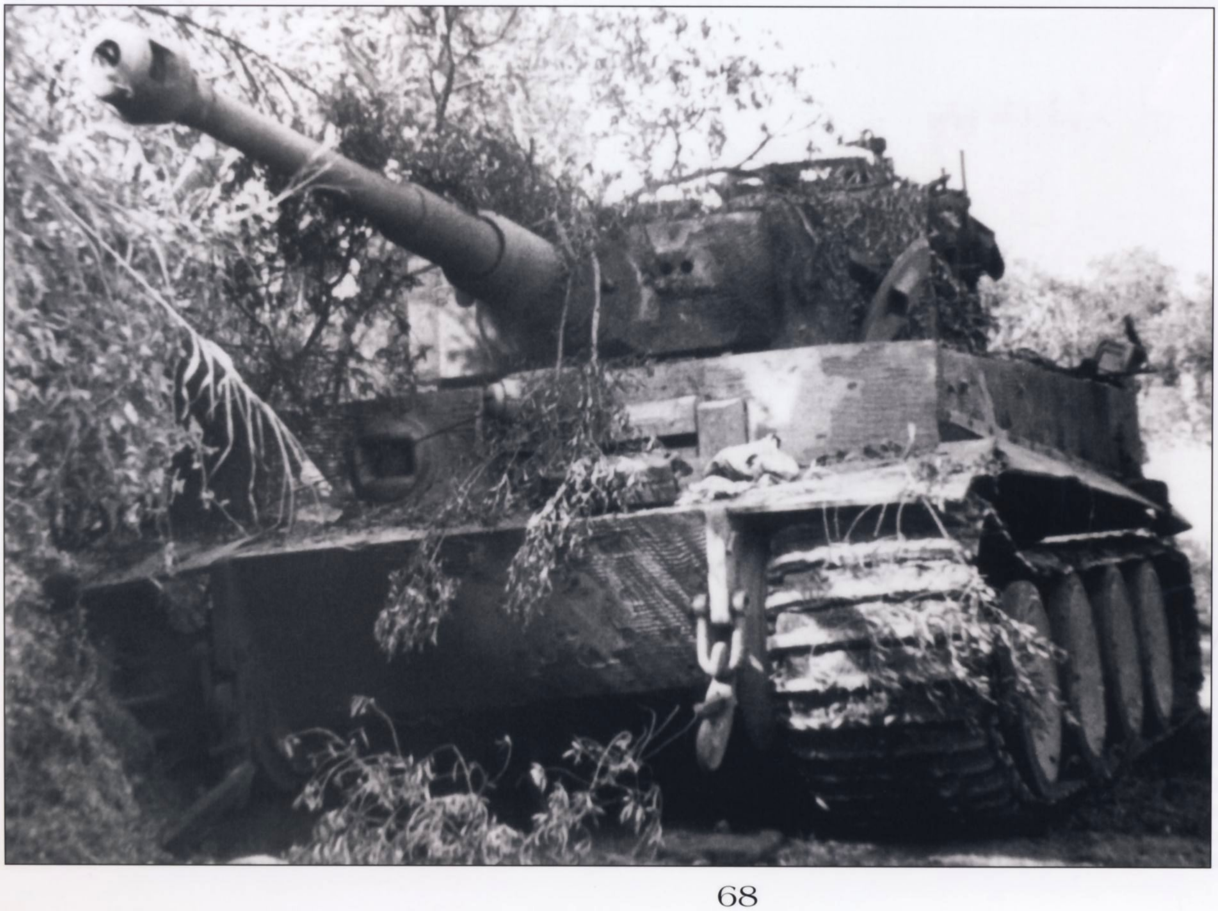
General Heinz Guderian inspects a Panzerbefehlswagen Tiger I from 13./SS-Pz.Rgt.1. The coaxial machine gun was removed to make more room in the turret for the extra radio set and the hole in the gun mantlet was plugged. Ammunition stowage was also reduced and the vision block on the right side of the turret and the turret periscope were not mounted. Records show that 89 Pz.Bef.Wg. Tiger I were produced.



A Tiger I from II./s.Pz.Abt.504, knocked out in Sicily. Equipped with 17 Tiger I's, the unit was assigned to Panzer-Division 'Hermann Göring' on 9 July 1943. Ten were lost during the first three days of fighting when they were blown up by their crews to prevent capture. During the following weeks, the German defenders were gradually pushed back towards Messina, where during the nights of 10 and 11 August, the remaining armored vehicles including one Tiger I were ferried to the Italian mainland.

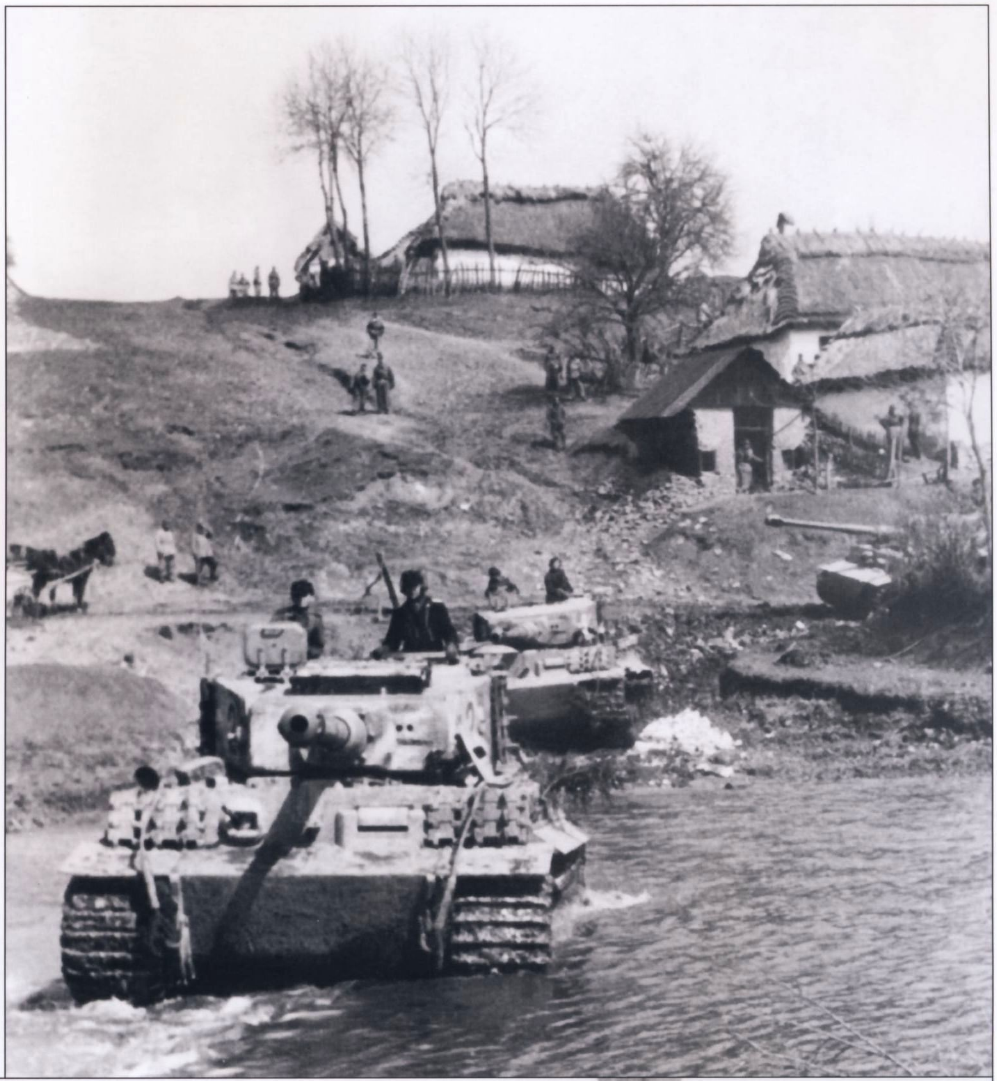


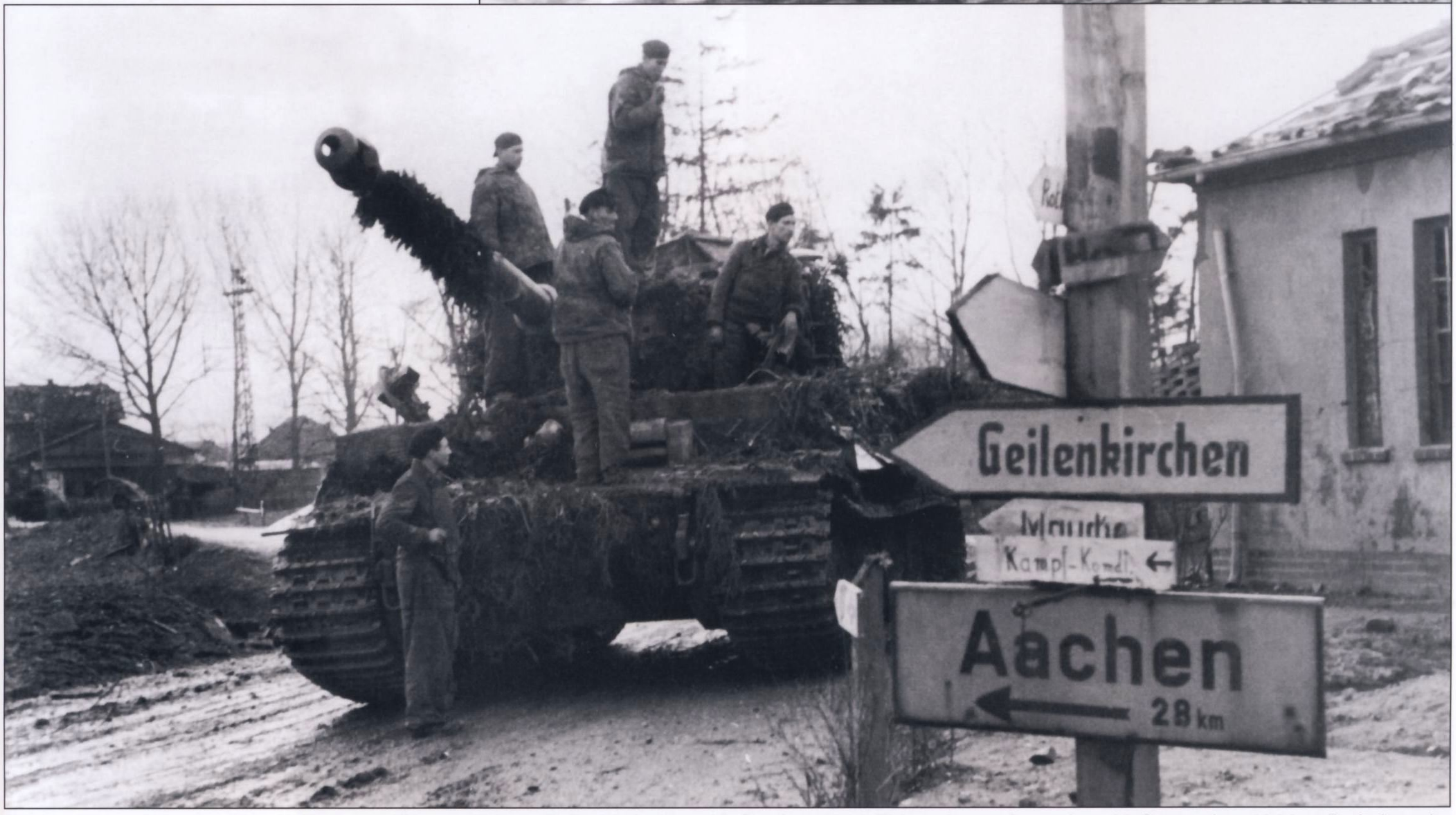
A Tiger I of s.Pz.Abt.507 near Tarnopol after the relief of the city in mid-April 1944. They were supported in the attempt by elements of 9.SS-Panzer-Division 'Hohenstauffen' and a small battlegroup formed from various other units, advancing to within seven miles of the city and allowing a small contingent to break out.



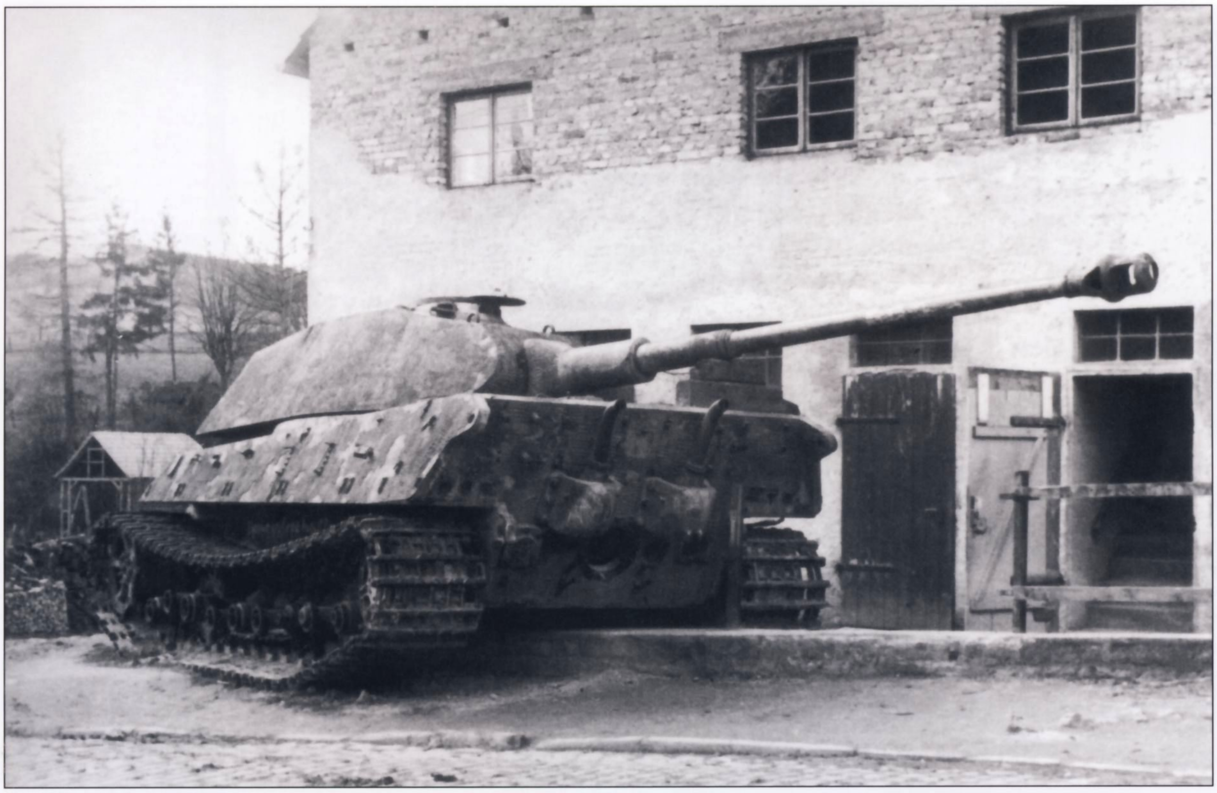
This is one of seven Tigers from s.Pz.Abt.508 that broke down and were abandoned or blown up on the road to Cori in late May 1944. The battalion was formed on 25 September 1943 and received 45 Tigers in December 1943 and January 1944. In February 1944, they were sent to Italy in response to the Allied landings at Anzio-Nettuno where they were unsuccessful in containing the Allied bridgehead.

A column of late Tiger I's from 2./s.Pz.Abt.506 crosses a shallow river in Poland during the summer of 1944. They were resupplied with 45 new Tigers with steel road wheels in March and April 1944. At this time, the battalions Tigers were marked with a large tactical numbers 1 to 14 on the forward side of the turret painted in white for 1.Kompanie and red and yellow for 2. and 3.Kompanie. Here we see the tactical number '2' painted in red on the side of the turret.



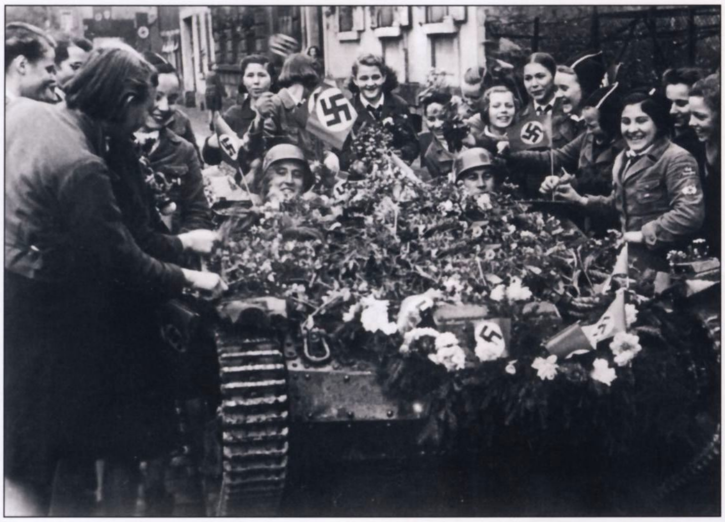


A Tiger I from Schwere Panzer-Kompanie 'Hummel' near Geilenkirchen on 16 October 1944. This unit was formed on 20 September 1944 at Paderborn by the Schwere Panzer Ersatz und Ausbildungs Abteilung 500 and immediately sent west equipped with 14 Tigers to counter the Allied airborne landings in Holland. On 8 December 1944, it was renamed 4./s.Pz.Abt.506.

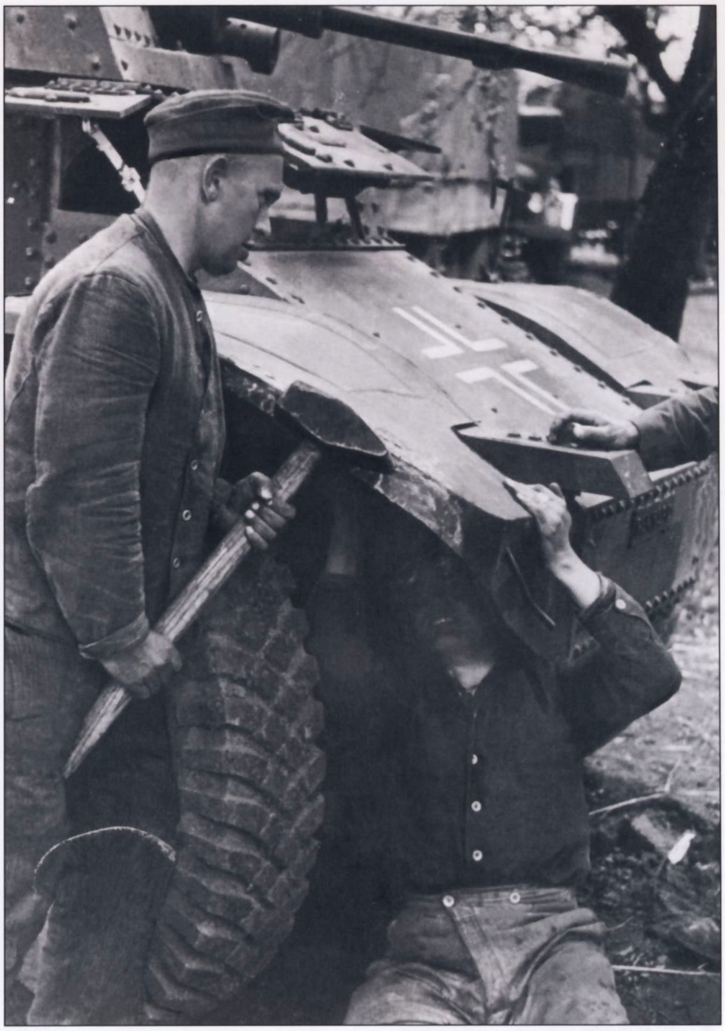


An early production Tiger II from s.Pz.Abt.507 abandoned in Polle, Germany in April 1945 but seen here sometime later after the local inhabitants have stripped it of any useful equipment including the outer road wheels. Of particular interest is that it is still fitted with the original Kgs 24/800/300 multi-piece cross country tracks that were replaced by a new design with a single connecting link in May 1944. It is one of three Tiger II's from Kampfgruppe Goerbig that were lost in action in the town from 6-8 April 1945.

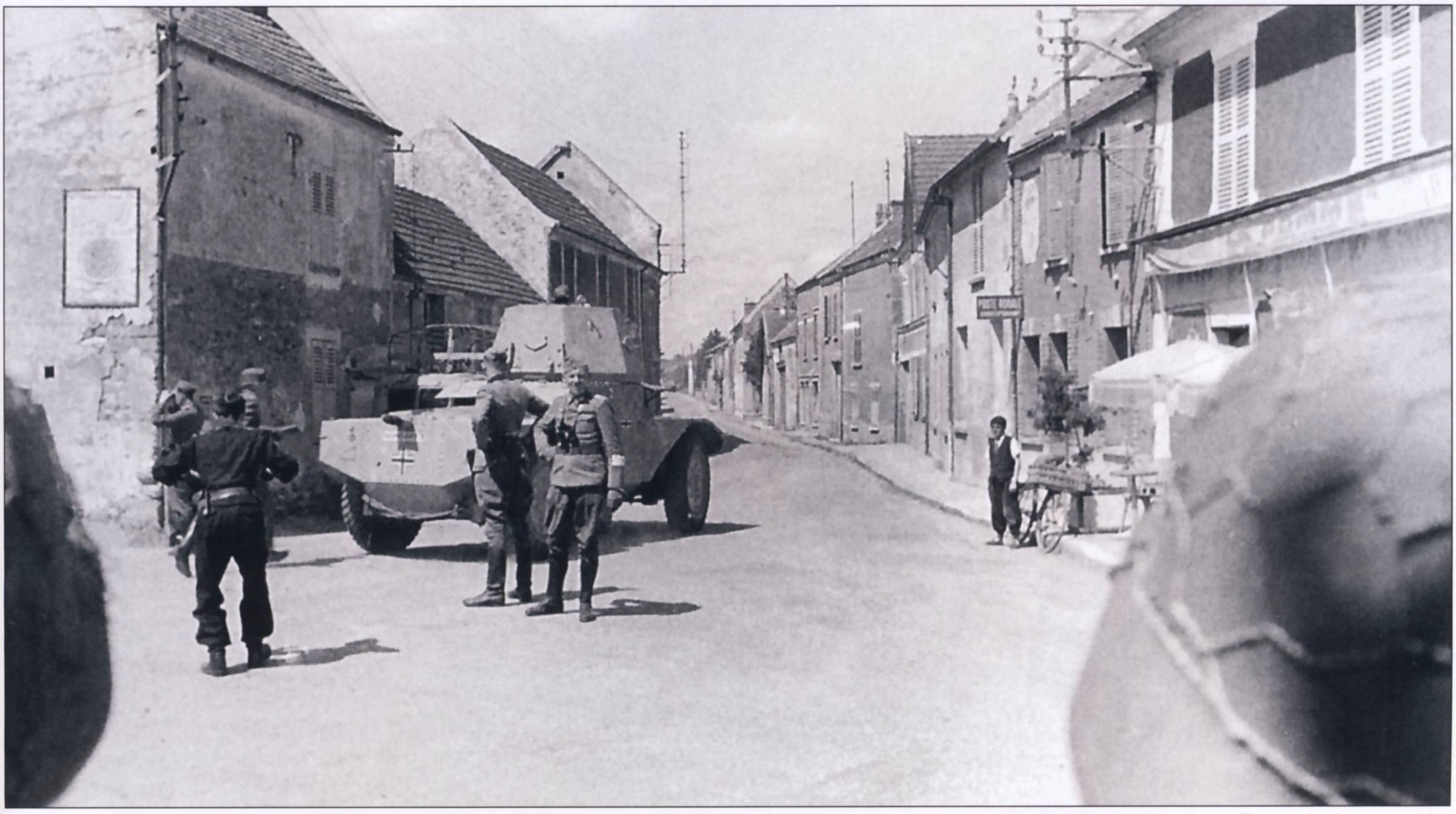
The Wehrmacht captured several hundred Renault UE tractors from the French Army in 1940 that were pressed into service in the German Army as the Infanterie Schlepper UE 630(f). Initially, they were used as Munitionsschlepper or le Schlepper and later mounted a variety of light weapons including the Wurfrahmen 40 and 3.7cm PaK35/36.



Several young women from the Bund Deutscher Mädel, or League of German Girls, the organization for young girls in the Hitler Youth movement, enthusiastically welcome the victorious German Army home after the Battle of France. The two soldiers are in a captured French Renault UE tractor which has been adorned with flowers. The girls are wearing the standard winter uniform with the Hitler Youth sports badge emblem on the sleeve and the triangular Hitler Youth Obergau badge with the name of the member's district embroidered on it.

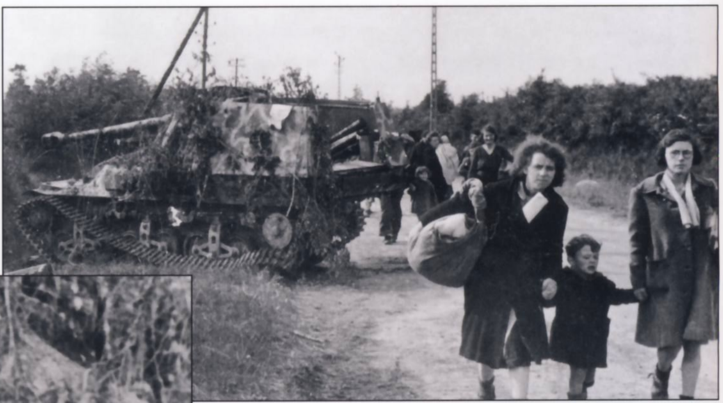


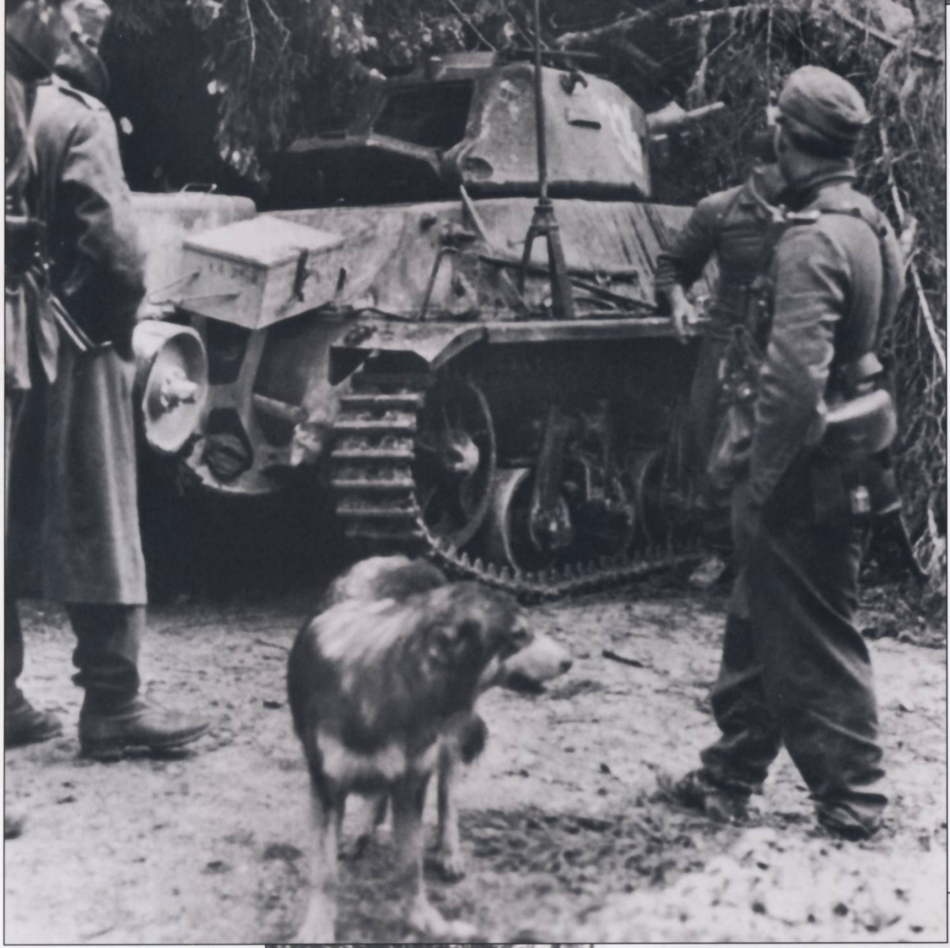
A Werkstatt-Kompanie delicately repairs a damaged fender on this Panhard 178 armored car. Over 200 of these vehicles were captured in 1940 and issued to various German units for the start of Operation 'Barbarossa'. In German service they were known as Panzerspähwagen Panhard 178-P204(f).



A very rare Panhard 178 with a CDM turret employed with Sicherungs-Regiment.1000 during an anti-partisan operation in Auvergne, France in August 1944. The turrets were produced by the CDM (Camouflage du Matériel), an underground organization created to provide heavy weapons to assist French troops in Southern France fight against the Germans in the event of an Allied landing there. About 45 were completed and at least four were captured and used by the Germans. The turrets were fitted with French 47mm guns.

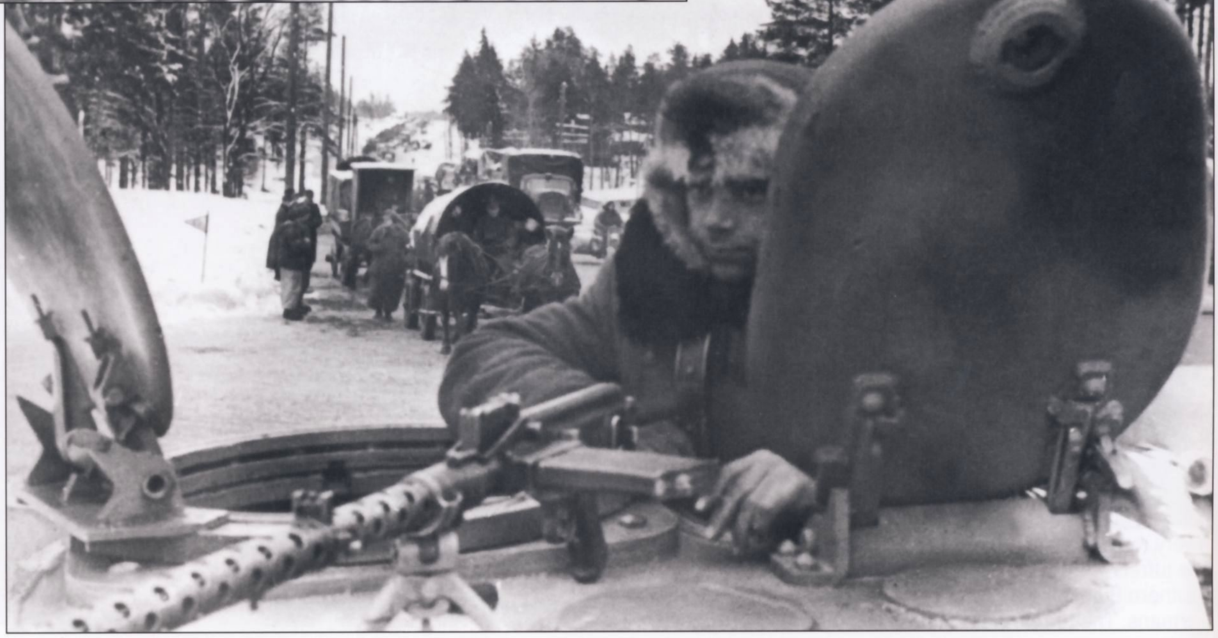
In 1940, the Germans captured more than 300 Tracteur Blindé 37L (in German service, the Lorraine Schlepper), built by the Société Lorraine. In May 1942, it was decided to mount the 7.5cm Pak40/1 on the Lorraine Schlepper chassis and 170 were produced between July and August 1942. In keeping with standard procedure, the Germans named it 7.5cm PaK40/1 auf Geschützwagen (GW) Lorraine Schlepper (f) (Sd.Kfz.135). Most were issued to Panzerjäger units operating in France.





A large number of French Hotchkiss H-35, H-38 and H-39 tanks were captured by the Germans in 1940 and later put into service as the Panzerkampfwagen 38h 735(f). This one is a Hotchkiss H-39 with the longer barreled 37mm L/33 gun but the Germans did not differentiate between them. The commander's cupola was cut down and a two-piece hatch installed. German radios were fitted along with a 2 meter rod antenna on a tripod base on the right fender. This one appears to have had a large tree dropped on it by partisans.

Captured Soviet tanks in serviceable condition were often used by the units that captured them. This BT-7M, with a conical turret, was called the Pz.Kpfw. BT 742(r) in German service. The turret ventilator and commander and gunner periscopes have been removed and the holes covered with circular plates welded to the roof and this one is fitted with a rotating circular hatch for the loader. The soldier in the turret is armed with a 7.92mm MG-13 machine gun.



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